

Therapeutic Riding: Learning and Recovery for People with Disabilities

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Abstract

The purpose of this study was to explore the process of therapeutic riding as an experiential and holistic approach to learning and recovery for people with disabilities as perceived by the providers of therapeutic riding. To enhance the connection between theory and practice and to suggest future research, the researcher endeavoured to develop a theory that contributed to the knowledge base of therapeutic riding, animal-assisted therapy and education, experiential education, and experiential therapy in addition to contributing to connections among them.

This topic was investigated because of the lack of research about the process of therapeutic riding, particularly from learning and a recovery perspective. Few studies have addressed how therapeutic riding outcomes are achieved or how the therapeutic riding process actually works.

This study was identified as grounded theory using qualitative data through interviews and narrative reflections with therapeutic riding providers, a researcher's journal, field notes, and written documents. Grounded theory analysis was used to analyze the qualitative data. This consisted of doing open, axial, and selective coding. This study provided detailed descriptions of the research approach, researcher's involvement, participant and site selection, data collection and analysis, methodological assumptions and limitations, credibility established, and ethical considerations.

The findings of the data analysis revealed the theme of relationships as central to the learning and recovery process of therapeutic riding for people with disabilities. The significance of the team relationships, the horse and rider relationship, and the providers

and rider relationship was found. The essential components of the learning and recovery process were presented in a diagram in the selective coding phase. Goals of therapeutic riding included psycho-education; behavioural and social; physical; and equestrian. Parts of the process of how outcomes were achieved included motivation; “opens new doors;” risk; task analysis; control; communication; and environmental factors. Outcomes of therapeutic riding included independence and mobility; confidence; and transfer abilities or skills. The implications of these findings for theory, practice, and further research were also explored.

Dedication

I dedicate this thesis to the animals that enrich the lives of humans through being part of their learning and recovery process. I also dedicate this to the humans who find value in sharing their lives with animals.

Acknowledgements

In the journey of this thesis I have experienced the importance of setting goals and achieving outcomes. Yet I cherish the times when I live in the moment and enjoy the process and I thank my animal friends for strengthening my ability to do this. I am grateful to my cat, Winston, and his captivating expression during my sleepy mornings while he lies in my bathroom sink as I brush my teeth.

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My mother has been a constant unconditional supporter and guide in my journeys and has shown me the value in all forms of life. My father's love of literature and quest to understand the unknown has kept a spark in me alive to continue searching for alternative possibilities. Thank you to my family and friends, both human and animal, for a listening ear when I needed to talk, being supportive and understanding when I was quiet, and a soft place to fall when I had a hard ride.

I have a great appreciation and gratitude to the dedicated staff, volunteers, riders, and horses at the therapeutic riding facility used in this study. You open doors to "walk on" where there were walls, and you light a beacon where only dark waters existed.

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“There’s something about the outside of a horse
that’s good for the inside of a human.”

-Winston Churchill (as cited in Rector, 1994, p. 101)

CHAPTER ONE: THE PROBLEM

Introduction

Holistic thinking views every phenomenon in relation to its meaningful context. It asserts that the whole of a phenomenon is meaningful and more complex than the sum of its parts (Miller, 1992). Holism is inherent in all phenomena including learning and recovery. It is a spiritual worldview in that there is awareness that our lives have a purpose, a direction, a meaning, and a goal that transcends our particular physical and cultural conditioning (Miller, 1992). Thus in holism a dualism should not occur between the observer and the observed, mind and body, experience and knowledge, or education and therapy. The opposite of dualism for Dewey is continuum (1938). A continuum is a series where parts are not noticeably different from the parts immediately next to them, although the ends or extremes are very different from each other. Education is a moral and spiritual enterprise that should encourage people to develop an emotional and spiritual voice of their own that may assist in the love of learning and the need to search for meaning (Bosacki, 1998).

Experiential education involves a holistic understanding instead of just examining specific parts (Joplin, 1995). According to Dewey (1938), “the belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative” (p. 25). Dewey explains that learning and recovery depend upon the quality of experience. It is the role of all providers to see that the

direction of an experience is educative and therapeutic. Education and therapy are greatly enhanced by experiences that lead towards growth. Experiential learning is learning through doing. It is a process through which individuals construct knowledge, acquire skills, and enhance values from direct experience. It is based on the assumption that all knowing must begin with the individual's relationship to the topic (Luckner & Nadler, 1997).

Recognizing the links between experiences in learning and recovery is essential for people with learning, mental, psychiatric, or physical disabilities. One form of experiential education and experiential therapy is therapeutic riding, a type of animal-assisted therapy and education. Therapeutic riding is a general term used to describe all equine-related activities performed for the benefit of people with learning, mental, psychiatric, or physical disabilities. People who become involved in therapeutic riding may use a horse as a support to work towards psycho-educational, social, behavioural, cognitive, or physical goals. Therapeutic riding offers many unique aspects that are not available with other animals.

Divisions of therapeutic riding include education, therapy, recreation and leisure, and sport. The therapy division subdivides into equine-assisted psychotherapy and hippotherapy. In equine-assisted psychotherapy, horses are used as supports for emotional growth and learning. Equine-assisted psychotherapy is a collaborative effort between a mental health professional and a horse professional. Emotional development through therapeutic riding may result in increased self-control, self-esteem, ability to cope with failure and frustration, ability to negotiate, decreased fear and anxiety, and improved social skills (Longden, 1999). Hippotherapy is a treatment for people with

movement dysfunction or neurological disorders, which is used by physical or occupational therapists trained as hippotherapists. The horse's walk provides sensory input through movements that are similar to human movements of the pelvis while walking. Thus, hippotherapy may improve motivation, balance, coordination, strength, endurance, gross and fine motor skills, posture, and mobility. It may also affect psychological, cognitive, behavioural, and communication functions (Engel, 1997a).

This grounded theory study explored the process of therapeutic riding in learning and recovery for people with disabilities. In particular the perceptions of the providers at a therapeutic riding facility in southern Ontario were examined. To date, few research studies have investigated the learning and recovery process of therapeutic riding. There was a need to assess the use of animals in therapy and education so that they may be considered part of a more recognized approach to helping people with physical, mental, psychiatric, and learning disabilities (A.M. Beck, 2000).

Background of the Study

Therapeutic riding may be used either as an alternative or in conjunction with traditional therapies or education for people with disabilities. Therapeutic riding may enhance existing services by complementing and extending other special learning programs such as speech and language therapy, adapted physical education, occupational or physical therapy, and psychological services (Engel, 1997b). Therapeutic riding may provide a wide spectrum of learning and recovery opportunities for students with learning difficulties as well as for students in general (Engel, 1997b).

Purpose of the Study

The purpose of this study was to explore the learning and recovery process at a therapeutic riding facility, as perceived by the providers of therapeutic riding. To enhance the connection between theory and practice and to suggest future research, the study endeavoured to move towards developing a theory that contributed to the knowledge base of therapeutic riding and animal-assisted therapy and education. This may also influence the theory and practice of experiential education and experiential therapy, in addition to contributing to connections between these areas. Through specific findings related to practice, the study sought to provide suggestions to enhance understandings of the learning and recovery process involved in therapeutic riding for people with disabilities. In addition, in moving towards developing a theory that was generated by this study and the lessons learned during data collection, these are potentially useful in future research studies in therapeutic riding, animal-assisted therapy and education, experiential education, or experiential therapy.

Questions Addressed

The study addressed the question: What theory explains the process of therapeutic riding as an experiential and holistic approach to learning and recovery for people with disabilities? This large question was separated into smaller, more researchable questions that provided the framework for the study. The following questions guided the selection of data collection and analysis techniques, as well as the presentation of the findings.

- What are the goals of therapeutic riding?
- How are the outcomes achieved? What are the major events or benchmarks in the process?

- What are the outcomes?
- Who are the participants? What are their roles in the process?

Rationale of the Study

This study was investigated because little is known about the learning and recovery process of therapeutic riding. Few studies have addressed how therapeutic riding outcomes are achieved or how the therapeutic riding process actually works. Furthermore, few studies have taken an educational focus when studying therapeutic riding or the use of animals in education. In addition, animal-assisted therapy and education studies struggle for acceptance in mainstream medicine. Since animal interaction is just a small part of the life of people in therapeutic settings, it is important to know how to assess improvement in people, since improvements can be subtle, transient, or delayed (A.M. Beck, 2000). There is also need to assess the use of animals so they may be considered part of a more recognized approach to helping people with physical, mental, psychiatric, and learning disabilities. This study, therefore, explored the learning and recovery process involved in therapeutic riding at a therapeutic riding facility as perceived by the providers.

Theoretical Framework

Major theoretical areas or disciplines were brought together in this study on therapeutic riding, including experiential education and experiential therapy. Thus, both learning and recovery aspects of therapeutic riding were explored. Often, the educational aspects have been examined separately from the psychological aspects of therapeutic

riding. Experiential education and experiential therapy seem natural partners, since therapeutic riding is a form of experiential learning and recovery.

Importance of the Study

This study is significant due to the limited research on the learning and recovery process of therapeutic riding and animal-assisted therapy. Research on therapeutic riding can provide theoretical and empirical grounding for improved therapeutic riding and the knowledgeable use of animals in the medical and educational community. There is a need to assess the use of animals so that they may be considered part of a more recognized approach to assisting people with physical, mental, psychiatric, and learning disabilities (A.M. Beck, 2000). It is hoped that the results of this study will inform practice through contributing to the development of a theoretical bases for therapeutic riding.

The insights and information gained from this study provide documentation that addresses the effects of treatment with the health industry, the educational system, and the public. The study may also help to regulate the practices within therapeutic riding. People who might be interested in the results of this study include therapeutic riding providers and animal-assisted therapy and education providers. Furthermore, educators, mental health professionals such as psychologists and counsellors, health professionals such as occupational therapists, people with physical, mental, psychiatric, or learning disabilities, the parents of someone with a disability, and the larger community may also be interested in this study

To determine the practical uses of therapeutic riding, it was important to move towards developing a theory of how therapeutic riding can be used in learning and

recovery. The grounded theory tradition was selected as the method of data collection and analysis because of its potential to contribute to the development of a theory.

Scope of the Study

This grounded theory study focused on the learning and recovery process of therapeutic riding for people with disabilities as perceived by the providers at one therapeutic riding facility. This means that anything related to the learning and recovery aspects of therapeutic riding at this facility is within the boundaries of the study. Anything outside this is beyond the scope of this study.

Outline of the Remainder of the Document

The remaining four chapters of this document serve several functions, including review of the related literature, explanation of the study's methodology and procedures, presentation of the results of the study, and discussion of the study's implications. This section provides a brief description of the content of each subsequent chapter.

Chapter Two reviews the literature related to the topic of the study. This chapter brings together the disciplines of experiential education and experiential therapy within the framework of therapeutic riding. Included within the section on therapeutic riding is the historical background of therapeutic riding; the divisions of therapeutic riding focusing on the education and therapy sections; and ethical and practical considerations. The chapter ends with research and theories on animal-assisted therapy and education.

Chapter Three outlines the methodology and procedures used in the study. The study was identified as grounded theory research and the implications of this are explained. This chapter includes a description of the research approach; researcher's

involvement; participant and site selection; data collection; data analysis; methodological assumptions; limitations; establishing credibility; and ethical considerations.

Chapter Four provides an overview and a summary of the findings of the study. This includes the learning and recovery process; the goals of therapeutic riding; the activities in therapeutic riding; how outcomes are achieved for riders; and outcomes of therapeutic riding.

Chapter Five begins with a summary of the first four chapters and then outlines the implications of the study for theory, articulating with existing theory, and larger theoretical issues. It also explores the implications for practice and for further research. Based on the results of the study, suggestions are provided for enhancing practice and facilitating further research.

CHAPTER TWO: REVIEW OF THE LITERATURE

Overview

This chapter has a synopsis of literature that addressed experiential education and experiential therapy, in addition to animal-assisted therapy and education and therapeutic riding. It explores the concept of experience, particularly in relation to education and therapy. It looks at the historical background of therapeutic riding, the divisions of therapeutic riding focusing on education and therapy, and ethical and practical considerations. Furthermore, research and theories of animal-assisted therapy and education are explored. It is important to note that the process involved in the learning and recovery aspects of therapeutic riding have not been well researched, and hence the literature is somewhat sparse.

Experience

Experiential education is a philosophy of education that is based on general theories of epistemology and assumptions about metaphysics. Thus, it is important to examine underlying assumptions of experiential education before exploring the process involved in a specific practice. Epistemology is the study of how and what people have knowledge about. Throughout time there have been many debates about whether people gain knowledge via their senses, through reason, or a combination of both (Crosby, 1995). Epistemology also involves whether people know objects of reason, like higher mathematics where there is no action, with more certainty than people may know things that they learn through their senses.

The Sophists, who were teachers in ancient Greece, illustrated an early theory of education. The teaching consisted primarily of reciting opinions on profound subjects

and helping students to learn to recite these opinions equally persuasively (Crosby, 1995). Since they believed that reality did not change, then answers to any questions posed would also not change over time. Thus, the method of teaching remained unchanged. The subjectivity of the learner was not relevant because of the nature of the object of knowledge. Thus, there was no need for debate, although Sophists disagreed among themselves about what they thought was absolute truth.

This model of education changed radically with the teacher Socrates (470-399 B.C.). He taught by asking questions, not by reciting answers. He asked about students' underlying assumptions, which was confusing to the students since they were not used to discussion (Crosby, 1995). Socrates believed that students had something to contribute to learning, and he believed that the process of becoming educated was more important than arriving at a final, static state. However, according to Plato, the true goal of education is the sense of objective reality. He stated that the true knowledge of absolutes is not achievable by most people due to their limited capacity to learn this. For Plato, objective absolutes do exist, and people can get closer to these realities by reflective and critical dialogue.

The philosophy of education went through another revolution with Aristotle (384-322 B.C.). Aristotle's background as a biologist contributed to his view of the universe in terms of growth and change. He explained the world as changing from one form to another state of being actually realized, like an acorn becoming an oak tree (Crosby, 1995). The actuality of something being realized depended on its species. How people learn about the world is based on what they feel and think, hence, it is based on

metaphysics. Aristotle said the study of things does not change for the most part, but it is investigation into what is real that does change.

The philosophy of education inherited from former educators and philosophers included the separation of the knowing mind, or subject, and the knowable mind, or object. The epistemological problems for education were how to get the knowing mind in touch with its object of knowledge, or the world. The answer to this fell into two major categories. Led by Descartes, the Rationalists in the 16 century, thought people can only know with certainty those things that they know through reason or thinking (Crosby, 1995). Thus, mathematics was knowable, but what people know through their senses was questionable. The other school, contrary to the Rationalists, led generally by Hume, believed people could rely only on sense data and that mental operations were only computations of what people gain through their senses (Crosby, 1995).

In 1787, Kant, a German philosopher, resolved the rationalist and empirical debate (Crosby, 1995). He believed that the source of order was not in the external world but in the human mind. People order their world in the very process of perceiving it. Thus, people use what they perceive by ordering it according to certain categories such as time, space, and causation. The only objectivity people can have is knowing that all humans order experience in some of the same basic ways because their minds have the same basic structure. Kant's theory provided room for both reason and experience to coexist.

Education and Therapy

Dewey had a concern with dualism. In creating a dualism, philosophers take a particular aspect of knowledge or reality and universalize it to a superior status or reality. The opposite of dualism for Dewey was continuum (1938). The educational dualisms that Dewey rejected included the separation of mind and body, authority and freedom, and experience and knowledge. Dewey (1938) argued that the ultimate goal of education was to develop an experiential continuum where the process of education, how a student learns, is given equal consideration with the content of education.

In light of Dewey's theory, education and therapy are discussed as a continuum. Differences are highlighted in an attempt to define boundaries, and similarities are emphasized in an attempt to find connections. One definition of education is the "process of acquiring knowledge and understanding" where learning is "knowledge gained" (Makins, 1994, p. 264). Recovery and learning involve the improvement of the condition of the mind or body. Recovery is "the regaining of something lost or the act of recovering from sickness or a setback" (Makins, p. 723). It is a process that involves physical, mental, and spiritual dimensions. Therapy is the "treatment of physical, mental, or social disorders" (Makins, p. 912). Therapy helps in the recovery process to restore someone to health.

Therapy tends to focus on people who are at the extremes in terms of physical, learning, psychiatric, or mental disabilities. When people are trying to recover, they may need to learn new skills, behaviours, and attitudes. People with physical, psychiatric, or mental difficulties may also have difficulty learning. Thus, the lines

between learning and recovery become blurred when the goals of both are to aid in the development and functioning of a person.

In experiential education, an essential characteristic is that learning is personal in nature. Furthermore, the emphasis in experiential education is also toward monitoring the individual's growth and the development of self-awareness (Joplin, 1995). There are degrees of psychological change that may not be appropriately dealt with in the classroom therefore, outside sources and professionals may be needed. In experiential education, students guide their own learning, and it is likely that they will want to know about their world and things that affect them personally.

Similar to developing a therapeutic relationship, teachers must develop a trusting and caring relationship with their students. Students need to feel safe to develop and express themselves within the classroom (Bosacki, 1998). A teacher may help to foster the learner's ability to perform skilfully and help foster a sense of confidence within the learner.

If a teacher, like a therapist, is seen as an authoritarian with all the right answers, the focus of teaching is on filling the learner's mind with facts, just as the focus of therapy would be on providing all the right answers for the cure. These learners or clients may see themselves as merely receiving or reproducing knowledge from others' authority, but not capable of creating knowledge on their own (Bosacki, 1998). According to Postman (1995, as cited in Bosacki, 1998), educators need to provide a means to integrate the subjective voice, which includes the spirit and emotions, with the objective voice of reason.

For Dewey (1938), the teacher aids students in developing an approach to their own experience by structuring the students' experience so that they may move from a challenge to a resolution. The educational process is based on the human experience of movement from difficulty to resolution (Crosby, 1995). A therapist may also play a similar role of guiding a client in resolving an issue and reflecting upon this afterwards. Furthermore, teachers and therapists must be aware of their own behaviours and what they say. Teachers and therapists can share only with their students and clients what they have developed as a person (Prochazka, 1995).

An additional similarity among teachers and therapists is role modeling. Both teachers and therapists role model what they want their students and clients to learn and how they want them to behave (Prochazka, 1995). Teachers or therapists acting as role models may be an effective way to promote and share emotional and spiritual experiences by validating the importance of their expression within the classroom (Bosacki, 1998). A variety of teaching activities may be used to foster this type of learning by promoting reflections and self-expression. This may include experiential activities such as psychodrama, art expression, journal writing, and therapeutic riding. Education is a moral and spiritual enterprise that should encourage children to develop an emotional and spiritual voice of their own, which may assist in the love of learning and the need to search for meaning (Bosacki).

Experiential Education

According to Dewey (1938), "the belief that all genuine education comes about through experience does not mean that all experiences are genuinely or equally educative" (p. 25). Dewey explained that learning and recovery depend upon the quality

of experience. It is the role of the providers to see that the direction of an experience is healing and educative. Education and therapy are greatly enhanced by experience that leads towards growth.

This debate between empiricism and rationalism is a basic epistemological debate in philosophy that radically influenced how people think about education. Dewey continued the philosophical debate on experience (Crosby, 1995). He accepted Kant's idea that the mind is an active, ordering principle. Thus, he accepted the world as we experience it rather than seeking some other reality. The goal of learning was to know about the world as we experience it. Thus, Dewey (1938) distinguished between two different but interconnected aspects of experience, which are the primary and secondary parts of all experience. The primary aspect of experience is sensation from the physical, psychological, and spiritual world. It provides the raw materials from which knowledge can begin. Reflection and the concern with knowing, is secondary (1938). The role of reflective experience is to use the data provided by primary experience.

This led to a philosophy of education that is the foundation of what some people call experiential education. For Dewey (1938), the goal of education is not having the right answer, for that might change, but the goal is being able to understand and use experiences. This is achieved by developing the thought processes with which people examine their experiences.

All learning is experiential, since a person must experience a subject (Joplin, 1995). However, experience alone is not sufficient to be called experiential education, since it is the reflective process that turns experience into experiential education. Experiential learning is learning through doing. It is a process through which individuals

construct knowledge, acquire skills, and enhance values from direct experience.

Experiential learning is based on the assumption that all knowing must begin with the individual's relationship to the topic (Luckner & Nadler, 1997).

One way to help define experiential education is to list its characteristics (Joplin, 1995). Experiential education is student directed (Joplin, 1995). Thus, learning starts with the student's perceptions and awareness. Second, learning is personal in nature (Joplin). Experiential education starts with the individual's relations to the subject of study. The relationship of educational experiences to personal growth can be incorporated into the classroom. Third, the process and product orientation are important (Joplin). The product of the study is valued within the context of the thought and work processes behind it. Fourth, evaluation is done for internal and external reasons (Joplin). Students are encouraged to develop self-evaluation skills and take part in the monitoring of their learning. Fifth, experiential education involves a holistic understanding and component analysis (Joplin). Thus, representing the complexity of situations is stressed over the simple summation. Sixth, experiential education is organized around experience (Joplin). Direct experience provides the substance from which learners develop their personal meaning. Seventh, experiential education is perception based rather than theory based (Joplin). Experiential education emphasizes a student's ability to justify an example rather than to recite an expert's testimony. It starts with the student's perception and moves to the expert testimony as verifier of views. Eighth, the emphasis within experiential education is to monitor the individual's growth and development.

Experiential Therapy

Experiential therapy has its roots in client-centred, existential, and Gestalt approaches to psychotherapy (Greenberg, Watson, & Lietaer, 1998). In client-centred therapy, instead of emphasizing techniques, Rogers (1951) emphasized the therapeutic relationship conditions of empathy, unconditional positive regard, and congruence. Existential therapy was concerned with people realizing their potential. It emphasized working with the whole person to not lose his or her wholeness in concepts such as drive, conditioning, or archetypes (Greenberg et al.). Gestalt therapy was based on three principles. The first principle is that it emphasized that everything is relational and in flux. Second, it incorporated phenomenology that emphasized subjective experience and the creation of meaning. The third principle is that dialogue involved open engagement between the client and therapist for therapeutic purposes. These humanistic approaches emphasized that clients were aware, subjective, and self-reflective agents.

The main objective of experiential therapy was to work with clients' awareness by focusing on subjective experiences, promoting reflectivity, and promoting a sense of agency (Greenberg et al., 1998). Two important foci could be identified as the cornerstones of experiential therapy approaches. The first focus was the importance of the therapeutic relationship in facilitating change in clients. A genuine empathetic and confirming relationship was crucial. The second focus in experiential therapy was on the importance of clients' experiences in therapy, considering clients' representation and examination of their inner subjective worldviews including feelings, perceptions, goals, values, and constructs (Greenberg et al.). In therapy, the client-therapist relationship was central to the change process.

Therapeutic Riding

Historical Background

Historical accounts of people's relationships with animals are sketchy, and the little documentary evidence known refers primarily to the lives of the wealthy and well known (Serpell, 2000). Even with historical evidence, there is a danger of over interpreting evidence or attributing values and attitudes from a modern perspective. Thus, historical evidence is treated with caution.

An archaic belief system referred to as animism involved the concept that all living creatures, as well as other natural objects and phenomena, had an invisible soul or spirit. A shaman achieved power by entering a state of trance or ecstasy. Consequently, the shaman was able to reestablish friendships with animals, acquire knowledge of their language, and transform himself into an animal when occasion demanded. The result was a kind of symbiosis in which the person and the guardian spirit fused to become two aspects of the same individual (Serpell, 2000). Since all manifestations of ill health were thought to be caused by angry spirits, the shaman provided the only method of discovering and countering the spiritual origins of physical and mental illness (Serpell).

In the preclassical period in ancient Egypt, the entire pantheon was dominated by distinctly shamanistic images of animal-headed gods and goddesses (Serpell, 2000). The notion that dogs could heal injuries by touching or licking people persisted into the Christian era (Serpell). Over time, a progression appeared to occur from a strong, archaic belief in the supernatural healing power of certain animals, such as dogs, to increasingly vague, superstitious folk practices.

In medieval Europe, this trend was associated with the Church's suppression of pre-Christian and unorthodox religious beliefs and practices (Serpell, 2000). In Europe

between the 15 and 17 centuries, it was thought that medieval witches consorted with the devil in animal form and possessed the shamanistic ability to transform both themselves and others into animals (Serpell). Thus, a close affinity with animals, once a sign of shaman power, became a symbol of diabolism.

In the Middle Ages and in the Renaissance, animal companions were used mainly as instruments that had the power to harm others by supernatural means (Serpell, 2000). These trends also reflected the medieval tendency to impose a rigid separation between humans and nonhumans. This was reinforced by ideals of human conduct that emphasized self-control and chastity, while rejecting what were viewed as animal-like attributes such as impulsiveness and cohesiveness (Serpell).

The Age of Enlightenment at the close of the 17 century brought changes in the public perception of animals. This included a gradual increase in sympathetic attitudes to animals and nature (Serpell, 2000). At the same time, pet keeping expanded out of the aristocracy and into the urban middle classes. In addition, the notion that nurturing relationships with animals could serve a socialization function, especially for children, surfaced at this time (Serpell). Compassion and concern for animal welfare became one of the favourite didactic themes of children's literature in the 18 and 19 centuries, perhaps to elicit an ethic of kindness and gentility (Serpell).

In the 18 century, animal companionship started to be applied in the treatment of the mentally ill. In 1792, Tuke in England at the York Retreat employed treatment methods that were more humane when compared with those existing in other mental institutions (Serpell, 2000). In the 1700s, two German physicians, Gerrard van Swieten and Ann de Haen, recommended horseback riding for people with mental illnesses

(O'Connor, 2001). They felt it had a soothing effect on the muscle fibres, which reduced attacks of hypochondria and hysteria. Germans were the forerunners in promoting and standardizing therapeutic riding (O'Connor).

During the 19 century, pets became common features of mental institutions in England and elsewhere (Serpell, 2000). This was to create a more pleasurable and less prison-like atmosphere. The benefits of animals also appear to have been recognized as serving a therapeutic role in the treatment of physical ailments at this time as a companion for people who were ill (Serpell).

The advent of scientific medicine virtually eliminated animals from hospital settings by the early decades of the 20 century (Serpell, 2000). For the next 50 years, animals were referred to symbolically in psychoanalytic theories concerning the origins of mental illnesses (Serpell). Freud's (1905) ideas concerning the origins of neurosis tended to reiterate the idea of humankind's inherently beast-like nature. Children were seen as similar to animals in that they were ruled by instinctual impulses organized around basic biological functions such as eating, sexuality, and self-preservation (Freud). Freud referred to this basic animal aspect of human nature as the Id. For Freud, mental illness results when these bottled-up animal drives find no healthy or creative outlet later in life and they erupt uncontrollably into consciousness.

For Levinson (1969), the solution for the growing sense of alienation between the inner self and nature, as personified in animals, was to restore a healing connection with our own unconscious animal natures. This was to be done by establishing positive relationships with real animals (Levinson). He argued that relations with animals played

such a prominent role in humans' evolution that they have now become integral to our psychological well-being (Levinson, 1972 as cited in Serpell, 2000, p. 13).

By 1977, therapeutic riding had developed considerably. Germans had defined three areas of concentration within medicine, psychology-education, and horsemanship. The more current development of this division, which is now more appropriately called the sport division, began with Liz Hartel who had poliomyelitis and a severe walking impairment. She won a silver medal in dressage at the 1952 Olympic Games in Finland (Wilson & Turner, 1998).

The United States and Canada, in particular, have been slower in developing a systematic approach to therapeutic riding. From about 1960 to 1982, North America focused merely on riding for the physically disabled and did not focus on the psychological and educational aspects of therapeutic riding (O'Connor, 2001). Therapeutic riding did not evolve in the United States until about 1970 and has only recently developed into a formal organization, the North American Riding for the Handicapped Association (NARHA). This service organization in the United States was created to promote the well-being of individuals with physical, emotional, and mental disabilities through equine activities (Engel, 1997a). Its subdivisions include the American Hippotherapy Association (AHA) and the Equine Facilitated Mental Health Association (EFMHA). In addition, there is the Equine Assisted Growth and Learning Association (EAGALA), which address the need for resources, education, and professionalism in the field of equine-assisted psychotherapy. There is also the Delta Society, which is an international, non profit organization of pet owners and health or human service professionals. Its mission is to promote animals helping people improve

their health, independence, and quality of life, which include horses (Delta Society, 1996). Canada has its own therapeutic riding organization, the Canadian Therapeutic Riding Association (CanTRA). This is a non profit organization for therapeutic riding and riders with disabilities in Canada.

Partly in response to the scepticism of the medical establishment, the theoretical emphasis has shifted in the last 20 years away from metaphysical ideas about animals as psycho-spiritual mediators, towards more scientific explanations for the therapeutic benefits of animals (Serpell, 2000). The positive therapeutic value of animals continues to receive little recognition in mainstream medical literature, and as a field of research it is under supported by government funding agencies (Serpell).

Divisions

The North American Riding for the Handicapped Association recognizes four divisions of therapeutic riding: education, therapy (which includes equine-assisted psychotherapy and hippotherapy), sport, and recreation and leisure.

In both sports riding and recreational riding, the goal is to develop riding skills, which are also called equestrian skills. In sports riding, the instructor teaches the person with a disability how to ride astride a horse. Some riders may need or want more than sports or recreational riding. These riders may be involved in the educational or therapeutic aspects of therapeutic riding. The focus of the remainder of the literature review on therapeutic riding divisions explores the educational and therapeutic divisions of therapeutic riding, since sport and recreation are not the focus of this study.

Education Division

Educators and special educators who use equestrian activities for education and special education gains can use therapeutic riding. Equestrian skills are not the primary goal. Teachers may use a horse, horse care, and riding skills as the means of teaching to multiple intelligences such as linguistic, mathematical, spatial, body-kinaesthetic, musical, naturalistic, interpersonal, and intrapersonal. Teachers may use the equestrian environment to increase attention span, motivate, and develop problem-solving strategies. Furthermore, when a person has satisfactory learning experiences with an animal, he or she may be ready to accept the school structure and new learning experiences (Jones, 1994). The student may begin to identify with the teacher through the animal.

In a psycho-educational approach, a person with a psychiatric disorder is educated in subject areas that serve the goals of treatment and rehabilitation (Jones, 1994). Mental health may be achieved through the learning of new adaptive skills (Jones). Riders may experience increased self-control, increased self-esteem, increased ability to cope with failure and frustration, increased ability to negotiate needs and wants, and decreased fear and anxiety (Longden, 1999). Cognitive development may be addressed in therapeutic riding. Riders may experience an increased quality of performance of a task, increased ability to follow instructions, increased ability in analyzing and monitoring of tasks, and increased ability in planning ahead (Longden).

Therapy Division

Within the equine-assisted therapy division of therapeutic riding there are hippotherapy and equine-assisted psychotherapy. The goal is rehabilitation of riders with

specific health care problems that can be physical, mental, or psychiatric (Engel, 1997a). Thus, developing riding skills is not the major goal or the primary concern. Therapeutic riding involves setting up activities that will require clients, individually or as a group, to apply certain skills and transfer those skills into their lives, such as in relationships or communicating. Tools that may be used and developed in equine-assisted therapy include non verbal communication, assertiveness, creative thinking, problem solving, leadership, taking responsibility, and teamwork (Equine Assisted Growth and Learning Association, 2001).

Health care professionals carry out therapy with specific training in the use of the horse as a support. They may use any aspect of the equestrian environment to accomplish rider goals (Engel, 1997a). Health care professionals may include a psychotherapist, a counsellor, an occupational therapist, or a speech therapist. Thus, equine-assisted therapy is a treatment process carried out by a health care professional that uses the horse as a support and intervention for specific health care problems (Engel).

Equine-assisted psychotherapy is a psychotherapeutic approach set in the natural environment of the stable and barn that uses the experience of the horse and the horse's movement to elicit self-awareness, promote healthy interpersonal communication skills, and elevate self-esteem. This experiential treatment method may use horses to assist with access to the client's unconscious. Equine-assisted therapy may be a metaphoric learning experience designed to reveal hidden messages from unknown aspects of the self. Through a client observing the relationship between a horse and a human, conscious awareness may be brought forth as it is experienced in the moment.

Equine-assisted psychotherapy may be effective with people who do not respond to traditional therapy or nonexperiential therapy. In addition, children in particular may find nonexperiential therapy difficult to engage in without full awareness and use of complex speech and language abilities. The emphasis of experiential therapy is on practicing new behaviours and personal growth that can impact the quality of lives directly. Experiential therapy may address a variety of mental health and human development needs including behavioural issues, attention deficit disorder, substance abuse, eating disorders, abuse issues, depression, anxiety, relationship problems, and communication needs (Equine Assisted Growth and Learning Association, 2001).

Although horses have only recently begun to help people with mental health issues and illnesses in North America, they have been assisting physically challenged people in therapeutic riding programs in North America and Europe for about 30 years. Hippotherapy refers to the physical benefits derived from riding, where the motions of the horse stimulate and exercise parts of the body. This produces movements in the rider similar to the human walk. The horse's natural warmth aids in relaxation of the rider. Vaulting, the assisted performance of gymnastics on horseback, also offers physical and psychological benefits for riders in terms of balance, coordination, and confidence. This is because riders may have to use additional muscles to support themselves in varying positions on the horse, such as riding backwards or sideways (Graham, 1999). Being successful in such an activity may add to the self-confidence of a rider. Occupational and physical therapists may use the movement of the horse as a means to facilitate more normal movement in the client, relax tight muscles, and improve strength, coordination, and motor skills (Engel, 1997a).

Research and Theories on Animal-Assisted Therapy and Education

Animal-assisted therapy is an interdisciplinary approach that uses animals as an adjunct to other therapies. It is also goal oriented, using assessment and evaluation procedures. Animal-assisted therapy involves a health or human service professional that uses an animal as a therapeutic support. It is a goal-directed intervention in which an animal meeting specific criteria is an integral part of the treatment process (Delta Society, 1996). Animal-assisted therapy is designed to promote improvement in a person's physical, mental, or learning abilities.

The beginning of the modern interest in research on human-animal interactions is often dated to Levinson's first paper on the subject published in Mental Hygiene (Levinson, 1962 as cited in Fine, 2000b, p. xxvii), entitled 'The Dog as a 'Co-Therapist'. However, an earlier paper published in Mental Hygiene by Bossard (1944), with a sociological perspective that was based on his personal observations and case studies, addressed the therapeutic value of dog ownership (as cited in Fine). Bossard discussed the important roles that domestic animals played in family life and in the mental health of family members, especially children. He described animals as a source of unconditional love; as an outlet for people's desire to express love; as fulfillment for the human's desire to exercise power; as a teacher of children on topics such as toilet training, sex education, and responsibility; as social lubricants; and as companions to humans (Bossard, 1944, as cited in Fine).

Levinson, a child psychologist, extended Bossard's idea of the health value of an animal from the household to the therapeutic setting (1962, as cited in Fine, 2000b). His promotion of pet therapy and pet-oriented child psychotherapy was met with cynicism

and disdain by many of his colleagues (1962, as cited in Fine). The situation has not changed that much since then, despite more research and supporting data (Fine). In one analysis of citations to landmark papers in the field of animal-assisted therapy, it was shown that the people who cite papers are drawn from the same group of researchers who have long been interested in this issue, few citations came from medical professionals outside this group (Fine). Furthermore, most studies involved small sample sizes or were relatively superficial, reflecting little funding support for studies in the field (Fine).

Aware of problems and unanswered questions surrounding animal-assisted therapy, Levinson outlined four areas of research that needed more attention (1981, as cited in Fine, 2000b). These included the role of animals in various human cultures and ethnic groups over the centuries; the effect of associations with animals on human personality development; human-animal communication; and the therapeutic use of animals in formal psychotherapy, institutional settings, and residential settings for people with disabilities and seniors (Levinson, 1983, as cited in Fine).

In looking at the three divisions of therapeutic riding, most of the research has been conducted on the physical benefits of therapeutic riding (DePaux, 1997). Furthermore, very few studies have been done on therapeutic riding with a psycho-educational focus (DePaux). Perhaps a more comprehensive understanding of how therapeutic riding is effective lies in understanding the interactions among the rider, the instructor, the horse, and the environment (DePaux).

Anecdotal, unique, and magical experiences with animals are often the major reason people become involved with animals and in the study of human-animal relations (Fine, 2000a). It may not be known why people are drawn to animals, but people may

have some evolutionary knowledge of the true value and advantage of our association with another species (Fine).

The following sections include several theories and studies on animal-assisted therapy and education focusing on the use of horses. These categories are broken up into theories and research on the individual, social, and cultural.

Individual

Motivation

Levinson (1969) believed that animals provide children with motivation for learning. Animal therapy can be useful when there is a lack of interest in subject matter and the child is not motivated to learn. Individuals with physical disabilities who use wheelchairs may be motivated by a horse to perform physical tasks for therapy in the care of the horse (Hart, 2000a). As a working partner, the horse may provide assistance with physical tasks. Horses may have the ability to inspire and motivate individuals to engage in activities in which they might otherwise not engage.

The attention directed at animals may aid in stopping certain undesirable behaviours, since a person may be preoccupied with what the animal is going to do next (Katcher & Wilkins, 2000). The animal is then a stimulus that continues to have novelty. With attention mobilized and directed outward, agitation or aggression may diminish, thereby creating a better teaching environment (Hart, 2000a). When animals are present, the possibility of an unplanned agenda is present. Children may find relief from the teacher if needed, without retiring into their own private world of fantasy (Katcher & Wilkins).

Attachment

Attitudes and attachment of humans to animals may play essential roles in the effect of animals on human health. The benefits of animals may be stronger when the person is strongly attached to the animal (Hart, 2000b). Animals may have therapeutic value because of their ability to help people feel secure, protected, and loved. Animals may be seen as transitional objects that may help children move into the world without their parents (Winnicott, 1971). Children may carry a teddy bear or blanket when they are confronting new situations or seeking independence from parents. Animals make good transitional objects because they move and show intentional behaviour, thus behaving more like a person than a stuffed toy (Katcher, 2000). Similarly, children often feel safe with a trusted animal, especially with a horse that is large and powerful.

According to Winnicott (1971), transitional objects become a kind of parent, ensuring children's safety when the parent is not there so children can become independent and form new attachments to other people. Adults may also feel secure about engaging in new experiences and entering new situations with the security of an animal. For instance, people who have a guide dog to help them because they are visually impaired may interact with others more because the dog enables them to feel safe.

Adjuncts to Therapy

Animals may make a unique contribution to a therapeutic relationship because of their capacity to make people feel safe, loved, and worthwhile. Animals may be incorporated into therapy for various reasons. This may include animals being used to

decrease initial reservations that may develop from entering therapy (Fine, 2000b). In addition, the therapist may appear less threatening; thus, the client may be more willing to reveal himself or herself. One of an animal's primary functions in therapy is to act as a bridge by which therapists can reach patients. Thus, an animal may have a role in treatment of those who have not been helped by humans.

Animals may also act as a catalyst in helping a client make progress through discussion of the animal within therapy. Animals may role model new behaviours and provide metaphors in therapy to help clients uncover internal concerns (Fine, 2000b). Animals as aides in child psychotherapy may be useful because it may be easier for a child to project unacceptable feelings onto an animal than onto a person (Levinson, 1969). In addition, an animal may supply some of a person's need for companionship and unconditional acceptance. The therapeutic relationship of a client and an attentive and empathic therapist may resemble the relationship between an animal and a human (A. Beck & Katcher, 1996).

Animals also have the ability to mirror what human body language is telling them (Equine Assisted Growth and Learning Association, 2001). If the person changes his or her behaviour, then the horse responds differently. A horse responds directly to the communication it receives. Similarly, to communicate with a horse a person must learn to read nonverbal signals from the horse and be able to respond accordingly. If a person wants to walk forward with the horse by her or his side, then she or he must look ahead and not in the direction of the horse. This person might feel that the horse is being stubborn and not cooperating because the horse will not move, yet the person must pay attention to the signals she or he is giving the horse. This is similar in human relations,

where people must look at how they are contributing to a situation and how their actions may change the outcomes.

Mind-Body Relationship

In therapeutic riding, riders must use aspects of both their mind that includes cognitions, thoughts, and feelings and in addition to the physical aspects of the body, such as movement, balance, and coordination. The mind and body must work together for goals to be successful. Certain aspects of the horse make this mind-body connection particularly evident. Work with horses may allow people to be in touch with feelings of powerlessness (Rector, 1994). The commanding presence of the large horse may generate respect, fear, or delight.

When a person feels a need to hang onto something mentally or emotionally, one way to establish control is to let go. A metaphor of this can be seen with a situation with a runaway horse. The only safe and effective way to gain control of a runaway horse is to let go of the lead rope. The awareness of needing help, the willingness to ask for help, and trusting that help is available are essential.

Furthermore, children who have difficulty with abstract learning may be shut away from their potential. Therapeutic riding may help in breaking down the learning process into units or tasks that are spoken or felt physically, as well as performed (Katcher & Wilkins, 2000). This is achieved by breaking down individual goals into smaller increments. A goal to gain independence is very broad and may be overwhelming. Riders may first focus on learning to use their hands to control the reins. Riders may begin by feeling comfortable letting go of the saddle, then having both hands on their head, then holding one rein, and then moving on to holding both reins. Once

riders feel comfortable moving through these progressions, they can move on to working on leg control. Throughout the process, riders are encouraged to use all their senses to achieve steps. Riders may be encouraged to count how long they can hold their hands in the air, to feel the rhythm of the horse, and to listen to the instructor. Thus, the body becomes a vehicle to achieve goals.

Mobility and Independence

Animals may represent or physically be an extension of people (Fine, 2000b). In therapeutic riding, people with disabilities are able to control an animal through voice commands, reins, and leg aids. They may use the horse as an extension of themselves for activities that they may not be able to do, such as walking. In addition, for individuals who cannot walk, horses may provide mobility in addition to stimulating muscles that are used when walking. Instead of an individual in a wheelchair who may receive help only from others, on a horse they are able to move by their own control.

Physical Activity

All riding provides the rider with a physical activity that may increase general health. Physical effects of therapeutic riding may include balance, stimulation, bonding, respiration, and pleasure (Engel, 1997a). Riding involves all of the muscles in the body and stimulates body systems. A strong cardiovascular system is required for a person to function. Individuals with severe physical problems who have poorly developed lungs due to a limited ability to exercise their cardiovascular system may benefit greatly from therapeutic riding.

Furthermore, the three-dimensional gait of a horse also causes the rider's pelvis, trunk, and shoulders to react in ways similar to those produced by the normal human walk (Engel, 1997a). Therefore, someone who cannot walk may receive the benefits of walking without the need for weight bearing by their legs when therapeutic riding. In addition, the constant shifting side to side, back and forth, and up and down may help riders to develop balance (Engel). The horse's movements are transferred to the rider and provide neuromuscular stimulation while increasing cardiovascular output (Engel). Riding may increase respiration, which in turn may increase the ability to vocalize (Engel).

Social

Social Support and Skills

Animals, such as horses, may provide a source of support that compensates for human companionship. Thus, an animal used for support may be effective with individuals who have inadequate emotional support (Hart, 2000b). Furthermore, animals may play a role as a stress buffer to mediate the impact of stressful events (Hart). Such stresses may include a range from going out into the world with a disability to losing a loved one. Animals may also stimulate people to socialize with other people and serve as a topic of conversation. They may promote people to speak to others, which may be especially important for individuals with speech and language difficulties.

In addition, animals may become substitutes for human companions. Therapeutic benefits of animals may depend on the person initially perceiving the animal as similar to another person (Serpell, 2000). Animals may offer constant, nonjudgmental, unconditional love and respect to individuals who may be unable to derive these

responses from relationships with other humans (Graham, 1999). In addition, animals may have the capacity to make people feel needed and allow people to have a care-giving role, which may be crucial for developing and maintaining self-esteem. Although humans are unable to directly share living environments with horses, the comforting, nonjudgmental, and consistent nature of their company is undiminished (Graham). Horses also provide great opportunities to care for and nurture another living creature that may be dependent on humans for food, water, shelter, grooming, exercise, socialization, and veterinary care.

Exchange theory suggests that people continue to engage in relationships as long as the benefits outweigh the costs (Graham, 1999). Advocators of exchange theory highlight the fact that literature on human-animal relationships has often focused on children, people with mental health problems, people with disabilities, the elderly, and other special groups of people. Hence, the benefits these people may receive from interactions with horses may outweigh the amount of work and money required to take care of the horses that are used.

Emotional Intelligence

Goleman (1995) describes emotional intelligence as social and self-awareness skills that include recognizing and managing one's own and others' feelings and mental states. Goleman uses people skills as a synonym for emotional intelligence (p. 43). In addition, he attributes the development of emotional intelligence to people's experiences with other humans.

The biophilia hypothesis created by Wilson (1984) states that humans have a biologically based attraction for nature and all its forms, including animals (as cited in

Melson). He believes that biophilia evolved because of the adaptive advantages it grants. The biophilia hypothesis suggests ways in which observation and interactions with animals may influence emotional intelligence (Wilson, 1984, as cited in Melson). The biophilia perspective may be used in exploring the development of emotional intelligence related construct to theory of mind and the development of nonverbal understanding. The theory of mind encompasses ideas about mental states and their relations to feelings and actions (Melson). Developing theory of mind is key to understanding societal interactions. Biophilia states that humans are instinctively motivated to decode the meaning of animals' behaviours and in doing so they gain insight into their own minds (Wilson, 1984, as cited in Melson).

The development of nonverbal skills is a central component of emotional intelligence (Goleman, 1995). Goleman stresses that the mode of emotion is nonverbal in reference to human-human communication. The biophilia hypothesis suggests that human attunement to animal behaviour consists largely of observing and decoding nonverbal behaviours. Nonverbal communication with a horse may spark a person's ability to decode verbal cues and to better understand human nonverbal behaviours (Melson, 2000).

Connection with Nature

According to Levinson (1969), people need a feeling of communion with all of nature at different stages in their development. A human has to remain in contact with nature throughout his or her lifetime to maintain good mental health (Levinson). When people first began to modify their environment and hence lose contact with it, they may

have felt a need to strengthen contact with nature through their relationship with animals (Levinson).

The biophilia hypothesis stated that humans have a biologically based attraction towards nature and all its forms, including animals (Wilson, 1984, as cited in Melson, 2000). Biophilia is believed to have evolved because of the adaptive advantages it conferred. There is a general acceptance among health professionals that animals are therapeutic and that having contact with nature is good for people (A.M. Beck, 2000). Feeling part of nature in general may have therapeutic value.

Animals may change the environment and may offer humans the ability to reconnect with the natural environment. In relation to an environmental change, horses particularly excel in this area since therapeutic riding necessitates a complete environmental change for most people. Therapeutic riding programs are different from other animal-assisted therapy programs in that they require the client to visit the horse's facility, not the other way around (A.M. Beck, 2000).

Cultural

Symbolism and Metaphors

Horses are large and powerful, which may create a natural opportunity for some people to overcome fear and develop confidence (Equine Assisted Growth and Learning Association, 2001). This may be seen as a metaphor when dealing with other intimidating and challenging situations in life. Activities in therapeutic riding may be designed to create metaphors for life. Horses, like humans, are social animals, and they have defined roles within their herds. They have distinct personalities, attitudes, and moods. Skills learned in dealing with an aggressive horse may be transferred to dealing

with aggressive people. Learning to communicate with a horse requires paying attention, learning nonverbal language, and responding appropriately, just as is required in communicating with humans (Equine Assisted Growth and Learning Association).

Animals may represent the outer symbols and projections of people's drives and desires (Levinson, 1969). The image of a person on a horse is often used to symbolize the superiority of the mind ruling the animal passions of the body (Kohanov, 2001). Freud (1955) believed that human minds are controlled by the moralistic superego, the id that desires everything, and the ego that tries to compromise between the other two. Freud believed that an animal represents the id, continually escaping restraint and controlling actions. Animals permit people to discuss normal actions, such as defecation and sexual intercourse, in public spaces. Animals may remind humans of the conflict between unrestrained instinctual urges and the cultural necessity of appropriate social conduct (Freud).

The Jungian psychoanalytic approach suggests that the essence of humans' relationships with animals is innate. This means that humans have evolved a predisposition to relate positively to certain species based on the idea that the animals could alert humans to danger by their behaviour (Graham, 1999). Jung recognized images of black mares as manifestations of feminine wisdom rising up from the collective unconscious (Jung, 1968). He called this the anima, the feminine aspect of the psyche that may be suppressed in some men. Anima literally means soul (Jung).

Another view regarding metaphors advocates that humans' responses to animals are primarily learned as they grow up within a particular culture or environment. People's wide-ranging views on animals, however, may indicate a learning process derived from

individual experience rather than a collective, inherited predisposition (Graham, 1999). Hence, some individuals may respond positively to therapeutic riding and animal-assisted therapy in general, based on life experiences with those animals. Children are encouraged to view certain animals positively (e.g., owls are wise and horses are strong) and others negatively (e.g., wolves and bears are predators and thus, dangerous). These views of animals are reinforced in children's literature, songs, games, television, and films (Graham).

Ancient belief is that animals and people can share identity and change one into the other (A. Beck & Katcher, 1996). Popular usage suggests that people can assume animal characteristics, such as being catty or sheepish. The belief that an animal is part of one's personal identity is reinforced by the social response to people with animals (Beck & Katcher). People with companion animals, or who engage in therapeutic riding, may be perceived as being socially attractive and as having desirable personal characteristics such as being nurturing, caring, playful, and sociable (Beck & Katcher). Animals thus may change people's social identity for the better as perceived by others.

Ethical and Practical Considerations

It is essential to mention that in therapeutic riding the safety of both humans and horses must be considered. The laws and ethical principles that already address animal welfare can be appropriately applied to animals in therapeutic settings (A.M. Beck, 2000). Horses must be well maintained with appropriate food, water, shelter, social interaction, and veterinary care. It is also important to consider the work stress for the horse and the well-being of the animal after it is retired from active service (Beck).

It is particularly important to note the language that has been used in describing the horse's involvement in therapeutic riding. A great deal of literature reviewed referred to the horse as a "tool" for therapeutic use. This may imply that the horse is an object being used to perform a task for only the benefit of a human. The use of this language neglects the horse as a being that has feelings and thoughts. Thus, I have chosen to use the word "support" to explain the horse's involvement in therapeutic riding. Support is a word often used by health care professionals to explain their role. In using a word that humans already use to describe themselves it shows the similarities of the roles of humans and horses. Support more accurately describes the role of a horse in physically carrying the weight of another and emotionally as well.

In addition, practical considerations for a therapeutic riding program include not only the positive impact of therapeutic riding but the possible negative impact on health of the participants and providers as well. Horses may have detrimental health effects, including transmitting infectious disease, causing allergies, and inflicting injuries such as bites (A.M. Beck, 2000). To help protect therapeutic riding teams from being placed in dangerous situations, the instructors or therapists must know how to select appropriate teams. Placing a novice individual, such as a volunteer, with a more unpredictable client may result in increased risk for all involved (Hart, 2000b).

Furthermore, it cannot be expected that all animals evoke uniform responses from all individuals (A.M. Beck, 2000). Responses to animals are a highly individual matter depending on the person's previous life experience with animals, the person's current health and responsibility, and the species and breeds of animals.

Conclusions

The available literature researched indicated that there is very little, if any, information on how the learning and recovery process occurs in therapeutic riding. The present study explored the learning and recovery process of therapeutic riding for people with disabilities based on the aforementioned literature and empirical evidence. To determine practical uses of therapeutic riding in programs, it was important to explore how therapeutic riding could be used in learning and recovery for people with disabilities. The grounded theory tradition was selected as the method of data collection and analysis because of its potential to contribute to the development of theory. The aim of this study was to generate theory about the learning and recovery process in therapeutic riding that is grounded in or based upon the data collected. The researcher sought to answer the following question: What theory explains the process of therapeutic riding as an experiential and holistic approach to learning and recovery for people with disabilities?

CHAPTER THREE: METHODOLOGY AND PROCEDURES

Overview

This grounded theory study used qualitative data from interviews and written reflections by therapeutic riding providers, a researcher's journal, field notes, and written documents such as a brochure, curriculum items, lesson plans, and a therapist's assessment form. This chapter describes the research approach, researcher's involvement, participant and site selection, data collection, data analysis, methodological assumptions, limitations; efforts to establish credibility, and ethical considerations.

Description of Research Approach

Since the Renaissance, discovery has been the aim of science (Strauss & Corbin, 1998). Nevertheless, how discoveries are made has varied greatly over time. Qualitative inquiry offers a methodology, a way of thinking about and studying social reality (Strauss & Corbin).

Qualitative Approach

According to Eisner (1991), there are six features that make a study qualitative. These include being field focused; the researcher as an instrument; its interpretive character; the researcher's voice in text; attention to particulars; and the criteria for being judged. First, qualitative studies tend to be field focused (Eisner). This means that the researcher goes out to the place s/he is studying, such as a school or therapeutic riding facility, and observes. Thus, a qualitative study is usually nonmanipulative and tends to study situations and objects intact (Eisner). This may also be referred to as a naturalistic

study. Although change may be occurring, a researcher will not manipulate change, but rather observe it.

A second characteristic of qualitative studies relates to the researcher as instrument (Eisner, 1991). The researcher engages in the situations and makes sense of them through perceiving the presence of behaviours and interpreting their significance. This appreciation for personal insight as a source of meaning does not provide total freedom. A researcher must provide evidence and reasons for findings (Eisner). A third feature of qualitative studies is their interpretive character (Eisner).

A fourth feature that qualitative studies display is the use of expressive language and the presence of voice in text (Eisner, 1991). The researcher's signature makes it clear that a person was behind the words, particularly in the use of I. Good qualitative writing helps readers experience the study. A fifth characteristic of qualitative studies is the attention to particulars (Eisner). A researcher may use particulars to arrive at general statements (Eisner).

The sixth feature of qualitative studies according to Eisner (1991) relates to the criteria for judging their success. Qualitative studies become believable through their coherence, insight, and instrumental utility (Eisner). Qualitative studies typically use multiple forms of evidence, and they persuade by reason (Eisner).

Grounded Theory Approach

Alternative or adjunct treatments may be useful if explored for recovery, just as alternative or adjunct teaching methods may be useful if explored for learning. One such alternative or complementary therapy or teaching method is therapeutic riding. In order to determine practical uses of therapeutic riding programs, it is important to develop a

theory of how therapeutic riding can be used in the learning and recovery process of people with disabilities. The grounded theory tradition was selected as the method of data collection and analysis because of its potential to contribute to the development of theory.

Grounded theory was the most appropriate approach because it may reveal how goals, processes, and outcomes relate in therapeutic riding. In addition, the study used detailed coding to explain how the process of therapeutic riding occurs. The basic purpose of grounded theory is to generate or discover a theory that relates to a particular situation. "The centrepiece of grounded theory research is the development or generation of a theory closely related to the context of the phenomenon being studied" (Creswell, 1998, p. 56). The study is grounded in the data. The grounded theory methods used to analyze the data involved identifying a "central phenomenon" in the data. As the researcher, I "attempt[ed] to derive a theory by using multiple stages of data collection and the refinement and interrelationships of categories of information" (Creswell, p. 12).

Grounded theory is a qualitative research method that was developed in the 1960s by two sociologists, Barney Glaser and Anselm Strauss. It uses a systematic set of procedures to understand processes and interactions in order to develop theory about a particular phenomenon. The aim of this study is to generate theory about the learning and recovery process of therapeutic riding for people with disabilities, which is grounded in or based upon the data collected. This study started with a broad research question that provided the freedom and flexibility to explore the phenomenon in depth (Ertmer, 1997). The research question identified the general focus for the study and was action and process oriented. The study sought to answer the following question: What theory

explains the process of therapeutic riding as an experiential and holistic approach to learning, recovery, and wellness for people with disabilities?

In addition, this study incorporated the use of narrative reflection as a data source through narratives from therapeutic riding providers, my field notes, and the journal that I kept. It was my hope that the results of this study will inform practice through contributing to the development of the theoretical basis of therapeutic riding and animal-assisted therapy.

Researcher's Involvement

In terms of my involvement with therapeutic riding, I first became aware of and intrigued by therapeutic riding during the winter term of 2001. Several factors emerged and contributed to my new appreciation and understanding of therapeutic riding. I was taking a course on the use of narrative at Brock University towards my Master of Education degree. At this time in my life, I wanted direction in my career and I wanted to tie my career interest to my thesis topic. I felt that people could benefit greatly by having the guidance of a trained professional by their side while they engaged in experiences that could transfer over into their lives. This could be accomplished through art, music, horticulture, or with the use of animals. Through the listening ears and encouraging words of my group in this narrative course, I began to do research on experiential psychotherapy and experiential education. I was drawn to animal-assisted therapy because I have seen wonderful therapeutic and educational effects of animals throughout my life.

Through my research, I found a therapeutic riding centre in southern Ontario where I became a volunteer from April to May, 2001. The centre received a grant to

employ students throughout the summer, and I later became part of the summer staff. I was employed as a summer employee every weekday throughout the summer session from July 16 to August 24, 2001. Then in September I resumed volunteering and continue to do so. At the centre, I learned firsthand about the theories and applications of therapeutic riding, which complemented the literature greatly. I wrote in my journal about my experiences and any insights I had. I made valuable connections with the centre, the staff, the riders, and their families.

Each therapeutic riding lesson is about 45 minutes, and as an employee I took care of the horse through preparing tack, grooming, and leading the horse during lessons. Alternately, at other times I also ensured the well-being of the rider through both physical and emotional support during the lessons as a side walker. I reinforced what the instructor or therapist asked the rider to demonstrate.

I had a balancing act between being a participant, as a volunteer or staff, and being a researcher. Most often I was a participant except when I made a conscious and deliberate effort to be a researcher such as during reflections in journal writing and interviews. In being a participant I become more in tuned with the horses, the riders, the team, and the environment. I was part of them instead of a part from them. I experienced therapeutic riding rather than having it explained or shown to me. The researcher part of me was used to analyze and reflect on my feelings and thoughts about my experiences. Being both a participant and a researcher provided valuable insights and pleasure in the experience of being part of therapeutic riding.

Participant and Site Selection

Through my research, I found a therapeutic riding centre in southern Ontario. This facility is a nonprofit, charitable organization that improves the quality of life for children and adults living with physical and cognitive disabilities through therapeutic riding programs. I became a volunteer once a week starting in April 2001 and continued throughout this study. I was employed as a summer employee every weekday throughout the summer session from July 16 to August 24, 2001. I had contact with the executive director, several riders, the families and caregivers of the riders, instructors, volunteers, summer employees, and the therapist, although not all of these individuals were actively involved in this study. I kept a journal of my personal experiences during this time of employment. The other methods used in this study took place outside my hours of employment. During this study I began volunteering, I then became employed for several months, then once the employment period was over I continued volunteering.

The sampling procedure used in this study was nonprobabilistic and purposive. Participants were intentionally sought because they met the criteria for inclusion in the study (Palys, 1997). All the participants in the study were female and between the ages of 18 and about 45. The exact ages of the participants are not known, since they were not directly asked. It is known that all participants are above 18 years of age. The executive director had the most experience, and then the occupational therapist and the instructors. The summer employees had to be students, so they tended to be younger and in high school. Volunteers are one category where age differs greatly, since they all bring a variety of experiences to their volunteer work. With my experience at this facility, I encountered only one male staff member, although there were many male volunteers. Furthermore, all the participants in this study were Caucasian. Out of about 20 summer

staff, 18 were Caucasian and 2 were Asian. Thus, it is not surprising that the participants were all Caucasian females, since there was little variety among potential participants. Social economic status was not asked about in this study and was not a factor explored.

The executive director of the therapeutic riding facility, Mandy, was contacted to get permission for this study and to ask for her involvement as a participant. Then participants were approached in person and provided with an information letter (see Appendix D) and asked if they were interested in being involved in this study. It was made clear to all participants that they did not have to participate. However, if they chose to participate, their participation was confidential and they could withdraw at any time without recrimination. All participants approached agreed to be involved and signed an informed consent form (see Appendix E). I wanted to include the physical therapist that was employed at the facility, but she resigned in August so it was not possible to include her. These six participants were Mandy, Lee-Ann, Sonia, Karen, Marie, and Cindy. Real names were not used to ensure confidentiality.

Executive Director, “Mandy”

Mandy is the executive director for a large therapeutic riding centre that services about 600 riders. In this position, she oversees the program and staff to make sure they are running a quality therapeutic riding program to the benefit of the staff and the participants, including riders, volunteers, horses, and donors. She is also involved with the promotion of therapeutic riding to the public, the horse industry, and the medical community.

Mandy started as a volunteer at a therapeutic riding centre in the United States, and then she worked as a volunteer instructor for 4 years. She completed her certification

to become an instructor and then assisted in a program in New Zealand for 2 years. She also completed the Canadian standards programs with the Canadian Therapeutic Riding Association and with the North American Riding for the Handicapped Association. She has been with the facility in this study for 13 years. Therefore, she has been in the field about 25 years. I became acquainted with Mandy through my summer employment and events for the facility.

Occupational Therapist, "Lee-Ann"

Lee-Ann is an occupational therapist who has worked at this facility since December 2000. Prior to this she volunteered as an occupational therapist in therapeutic riding at a children's treatment centre. To find out where her specific interest lay in occupational therapy, she went to British Columbia and was involved in the recreational side of therapy, including disabled skiing. Involved with an adventure company, she realized how much she enjoyed this and other outdoor activities such as kayaking and horseback riding. This is where she developed connections with horses and understood what they could offer her practice.

Lee-Ann studies and uses therapeutic riding techniques. It is difficult to get therapists to be involved in therapeutic riding because it is seen as a specialty. In addition, some people do not feel comfortable with horses. Lee-Ann had no formal training in applying her occupational therapeutic skills to therapeutic riding, but she has adapted her treatment through what she has learned and experienced. I became acquainted with Lee-Ann during my summer employment training on disabilities and

when she was in the arena sharing her expertise with the staff on how we could better assist the riders.

Instructor, "Sonia"

Sonia first came to this therapeutic riding facility because she was interested in being around horses, not in therapeutic riding. She learned about the facility through a friend that lived nearby. Thus, as a teenager she became a program volunteer where she was a side walker and a horse leader. Then she became a summer staff employee, and then a volunteer instructor for several years. Sonia completed her certification in therapeutic riding instruction with the North American Riding for Handicapped Association and the Canadian Therapeutic Riding Association. She was also a part-time employee and then a full-time employee for the past 4 years.

Currently, Sonia is a staff instructor, which means that she works under the equestrian director in helping to administrate the program and she teaches. Although she initially came to the facility for the horses, she stayed for the riders. She is interested in the equestrian aspects of therapeutic riding and working with children who have mild psycho-social issues. Sonia enjoys using games and fun activities on horseback to teach skills. I became acquainted with Sonia during my first session of volunteering, and I continued to volunteer in her class throughout my volunteer time with the facility.

Instructor, "Karen"

Karen has been involved at this therapeutic riding facility for about 5 years. She first became involved as a volunteer when she donated her horse to the facility. She could no longer use him in eventing since he had an accident and he could no longer

jump or handle the required workload. Nevertheless, he was sound and could work in other capacities. Since her family could not afford to maintain a horse that she could not use, she wanted to find something that he could do to be productive. A family friend told her about this facility, and she donated the horse to them. Since Karen wanted to stay involved with him, she started volunteering at the facility.

For 2 years Karen volunteered, and then she became part of the summer staff. She was promoted to instructor, and she has been doing this for the past 2 years. Although Karen does not have formal instructor certification, she has 10 years riding experience and many riding certifications with the Canadian Equestrian Federation. She hopes to go into coaching and instruction in the future. She was one of my supervisors for my employment period as a summer employee.

Volunteer and Summer Employee, "Marie"

Marie learned about this facility through a friend of her family who was riding there. Since she had free time during the day, she began to volunteer. She did the volunteer training and orientation, and since she had ridden and was familiar with horses it was not difficult for her to learn. In the spring of 2001, she began as a volunteer in a hippotherapy class, where she was thankful for the support of the therapist in the class. Her role as a volunteer was to assist the occupational therapist in helping with the cognitive and physical development of the riders. In addition, she groomed and tacked horses.

As a summer employee Marie went through a week of training that she found very useful. She compared the role of a summer staff person to that of a full-time volunteer with a little more responsibility. Marie has just finished high school, and she is

interested in pursuing her education in occupational therapy, attributable in part to her time at this facility. I worked with Marie throughout my summer employment period. She enjoyed sharing her knowledge and experiences on a variety of topics, especially therapeutic riding.

Volunteer and Summer Employee, "Cindy"

Cindy has been involved in therapeutic riding for 7 years. She learned about it through a booth at a shopping plaza, but she did not have the time to volunteer at that time. It was about 2 years after she found out about the organization before she was able to volunteer. When she had more time, she began volunteering once a week. The instructor taught her about lesson plans, goals, and progressions. She filled in for a year as the equestrian director's assistant while the usual assistant was on maternity leave. The equestrian director at that time is the current executive director, Mandy. After her term as equestrian director's assistant, Cindy went back to work in retail and continued at the facility as a special event volunteer.

Recently, Cindy went back to university and was eligible to become a summer employee. She is interested in entering a teacher education program after completing her degree. She was also working on being certified as an assistant instructor with the Canadian Therapeutic Riding Association and the North American Riding for the Handicapped Association. I worked with Cindy throughout my summer employment period.

Data Collection

In terms of the distribution of the data, when participants were approached they were also provided with a letter of information to explain the study and what their participation entailed in more detail. When the participants contacted me and agreed to participate in the study, I then gave each one a request for a narrative and the Informed Consent Form, which I described in detail, and answered any questions.

The data sources for this thesis are the following: a researcher's journal; narratives written by therapeutic riding providers; interviews with therapeutic riding providers; field notes; and documents that include curriculum items, lessons plans, a brochure, and the therapist's assessment form.

Researcher's Journal

I used a daily journal to record observations, thoughts, feelings, and reflections about my experiences with therapeutic riding. My journal as a researcher was about my own experiences during my hours of employment at a therapeutic riding centre in southern Ontario from 8 a.m. to 4 p.m. weekdays during July and August 2001 and during volunteering in April 2001 to June 2001 and September 2001 until April 2002.

Narrative

A narrative was completed by each participant prior to an interview (see Appendix B). A narrative was used so that the participants could reflect on their experiences with therapeutic riding. Participants were asked to write a story or narrative about a rider who stood out in their mind. They were asked to select a rider that they were with for several lessons so that they were able to see the impact of therapeutic riding

with a focus on the psychological and educational aspects. They were asked to use as much detail and reflection about this story as possible, to make it as long as necessary, and that it be typewritten if possible. They were told to not include names or identifying information about the rider for confidentiality reasons.

Interview

An interview provided detailed responses to questions in areas that include demographics of the participants in addition to goals, process, and outcomes of therapeutic riding as perceived by the participants. When participants contacted me and gave me the narrative piece, I provided them with questions for the interview. Narrative pieces were read before each interview so that during the interview the participant could further elaborate on some aspects of the piece and provide more explanation in other areas that might be unclear. The questions were provided to the participants prior to the interview to allow for reflection and thought (see Appendix C).

I was at no time isolated with a single participant. Interviews took place in an office with windows and an open door at the therapeutic riding facility or at a convenient and mutually agreed upon public area, such as the public library. A convenient time was established with each participant. Each participant was asked to ensure she did not refer to any clients by name. The interview was audio-recorded, then transcribed and analyzed. No names were included in the transcripts in any case. A member check was done, that is, the participants were provided with copies of the transcripts and data analysis, and necessary changes were made. Changes that were made included sentence structuring and grammar of what was said during the interview.

Field Notes

Field notes at the therapeutic riding facility were recorded on Mondays from 10 a.m. to 12 noon from October 29 to December 17, 2001. The field notes included observations recorded on the spot and insights or reflections that were added following the observation. Field notes were used to provide descriptions of the participants' behaviour, with emphasis on the setting, group structures, nonverbal information, and interactions among participants.

Documents

Written documents were collected from participants and the facility to capture data. Any written documents collected were materials generated through, and in conjunction with, the learning and healing process in therapeutic riding. These written documents included curriculum items, lesson plans that instructors individually do for lessons, an example of the therapist's assessment form, and a brochure distributed to the community about the facility and the programs.

Data Analysis

This study was identified as grounded theory using qualitative data through interviews, narrative pieces by therapeutic riding providers, a researcher's journal, field notes, and written documents. The process of data analysis in grounded theory research was systematic and followed a standard format. Grounded theory was concept oriented and included open coding, axial coding, and selective coding (Ertmer, 1997). I will explain in detail how I arrived at conceptualization so readers can follow my path of logic (Strauss & Corbin, 1998). It is important to note that all data were considered as

potentially relevant to this study, and thus all data were considered at each level of coding.

Open Coding

In open coding, I formed initial categories of information about the phenomenon of therapeutic riding by segmenting information. Within each category, several subcategories were formed and data were sought to dimensionalize or show the extreme possibilities on a continuum for each property (Creswell, 1998).

During open coding, all data were scanned for potentially interesting or relevant items. All data were coded line by line to look for major ideas, then phrase by phrase to do a detailed analysis. This was done to pull out striking, puzzling, or inadequately analyzed information that may have been significant. Analysis was also furthered through the use of comparison techniques such as “waving the red flag” (Strauss & Corbin, 1998). When terms such as *always*, *never*, *sometimes*, and *occasionally* were used, this information was scanned for usefulness.

In coding, it was essential to recognize when my own biases, assumptions, and beliefs intruded into my analysis. To help do this I often put the material aside for a few days to gain a different perspective, I visited the facility and engaged my ideas in practice, and I sought outside guidance from my supervisor and committee.

After scanning all data and forming a lengthy list of pertinent ideas and concepts, I formed initial categories of information about the learning and recovery process of therapeutic riding by segmenting information. Within each category, I identified several properties or subcategories, and I inspected the data to dimensionalize or show the extreme possibilities on a continuum for each property (Creswell, 1998).

The concepts developed led to classification that was broken down into incidents, ideas, events, or acts, and each was given a name (Strauss & Corbin, 1998). This led to the beginning of axial coding, exploring the central theme or relationships, and initial stages of a process diagram to be further explored in the selective coding stage. Labels that were given incorporated detailed analysis of the data. Memos were also used during analysis to record thoughts and directions for further data analysis and were used as a data source. Concepts were then grouped into categories to reduce the number of units with which I was working. These concepts also stood for the phenomena being studied (Strauss & Corbin). Categories were defined and variations in their properties were identified.

The categories and concepts that were explored in open coding are explained in the sections on axial coding and selective coding. In the sections on axial and selective coding, data were scanned again to thicken and layer the coding. In axial coding, the central theme was developed. The concepts developed in the open coding phase are included in the diagram from the selective coding process and are explained in detail in that section. The concepts and categories from the diagram were developed and grouped in the stage of open coding.

Axial Coding

In axial coding, I assembled the data by using a coding paradigm or logic diagram in which I identified a central phenomenon, explored causal conditions, examined specific strategies, identified the context and intervening conditions, and delineated the

consequences for the phenomenon. I focused on how the interweaving of events led to identified changes in the original situation as a result.

Categories became saturated in grounded theory. That meant that information was added until no more information could be found. I used a constant comparative method, which refers to the process of taking information from data collection and comparing it to emerging categories. Thus, I scanned the data again for a layering effect. Subcategories answered questions about that phenomenon and offered explanations for the phenomena.

At first I had difficulty choosing an appropriate term for the central theme. I saw the terms “connections” and “relationships” as very similar to explain this theme, but through further examination I felt the term “relationships” was more suitable to capture its essence. According to the Collins dictionary (Makins, 1994), a connection is a relationship or association or a bond. A relationship is the dealings and feelings that exist between people or a connection between two things (Makins, 1994). The dominant theme that emerged in the data was relationships.

Selective Coding

Categories became saturated in grounded theory, which means information was added until no more information could be found. This was done by scanning data and comparing it to emerging categories. It was a constant comparative method, which refers to the process of taking information from data collection and comparing it to emerging categories

In open coding, categories and their properties were generated and it was determined how categories varied dimensionally. In axial coding, categories were systematically developed and linked with subcategories. Selective coding was the process

of integrating and refining categories. The major categories were finally integrated to form a larger theoretical scheme, allowing the research finding to move towards developing a theory (Strauss & Corbin, 1998).

The first step to integrate categories was to decide on a central category that represents the main theme of the research (Strauss & Corbin, 1998). This theme was relationships. All major categories related to this central category. This central category of relationships appeared frequently in the data. The label for this central category is sufficiently abstract so that it can be used to do research in other substantive areas, leading to the development of a more general theory (Strauss & Corbin). Contradictory or alternative cases should be able to be explained in terms related to the central idea.

Several techniques were used to facilitate identification of the central category and the integration of concepts (Strauss & Corbin, 1998). These included making use of diagrams and reviewing and sorting memos. Diagramming enabled me to gain distance from the data, forcing me to work with concepts rather than with details of data (Strauss & Corbin). It also demanded that I think carefully about the logic of the connections of the process, because if this were not clear, then the diagrams would come across as muddled and confused (Strauss & Corbin). They did not contain every concept that emerged during the research process.

Methodological Assumptions

An important underlying assumption in this study was that “all of the concepts pertaining to a given phenomena have not yet been identified, at least not in this population or place” (Strauss & Corbin, 1994, p. 37). Thus, this study was undertaken to

identify concepts pertaining to the learning and recovery process in therapeutic riding for people with disabilities at a particular facility.

A major assumption that has been made in this study that may have a potential bearing on the outcome of the study is that therapeutic riding can achieve learning and recovery outcomes. This assumption was made because research has suggested that therapeutic riding may cause outcomes in these areas. However, it was not assumed that all students have learning and recovery outcomes, since outcomes depend on a variety of factors.

This study assumed that all participants had the capacity for a particular level of English, both verbal and written, to be able to complete a narrative and be involved in an interview. This level of English is probably also an informal requirement to be employed at the centre, since speech and language difficulties of the participants would be compounded by staff language difficulties. Furthermore, participants were encouraged to supply any personal additions to the study beyond the narrative, interview, and providing documents if they wished. Thus, participants could express their views in other mediums if they wished in addition to the narrative and interview. Sonia gave me examples of her curriculum items, lesson plans, and relevant literature. Lee-Ann gave me a sample of the therapist's assessment form.

Limitations

A limitation of this study was that some of the data collected, including the narratives, journal, interviews, and field notes, were self-reported. Furthermore, the narratives and interviews were done retrospectively. Thus, the perceptions of the providers may have changed over time and they may not remember as much about a rider

they observed in the past. However, participants were encouraged to use an example for the narrative that was recent enough to increase detailed, accurate recognition and to recall influences on the rider.

Another limitation is that riders and their families may have different perspectives on their experiences with therapeutic riding than the providers. However, the voices of the riders, the parents, or other community members were not included in the study except through indirect observations in field notes and the researcher's journal. Therefore, providers may have different opinions on the goals, process, and outcomes of the riders, and hence may not have accurately represented the opinions of the riders themselves.

All participants were female and Caucasian; thus, there was not an equal representation of genders and ethnicity among participants. These factors could not be incorporated into the study due to the limited variety among possible participants at the centre. Social economic status was also not included in this study.

Another limitation was that, because of differences between therapeutic riding programs, the findings of the study could not be generalized beyond the therapeutic facility used in the study. Despite this limitation, the findings may be useful to other therapeutic riding facilities in their understanding of how the learning and recovery process occurs in therapeutic riding for people with disabilities. The study was limited to researching the process of therapeutic riding based on only the curriculum currently used at this facility. It was not possible to add other components to the curriculum, as this might have compromised the program, quality or safety.

In addition, I was the only one who coded the data, so only one lens determined categories and I might have overlooked some things. Since every piece of research, both quantitative and qualitative, involves an element of subjectivity, it was important for me to take appropriate measures to minimize subjective intrusions into the analyses (Straus & Corbin, 1998). Thus, I showed the participants my analysis of the data to gain multiple viewpoints and comparisons. They provided suggestions for the analysis.

Credibility Established

One of the procedures used to ensure that results are credible included member checking, which are informal checks with participants for accuracy during data collection. This was done for the interviews with the transcripts and interview analysis. I showed the participants my analysis of the data to gain multiple viewpoints and comparisons. They provided suggestions, additions, and adjustments to the analysis.

In addition, mechanically recorded data in the form of a tape recorder during interviews was used. Another procedure that was used to ensure that results were credible is the triangulation of data. This refers to the process of using multiple data collection methods, data sources, and analysis or theories to check the validity of the findings. Participant language in the form of verbatim accounts, which are literal statements of participants and quotations from documents, was also used in this study.

Ethical Considerations

The procedures in place to protect the physical and psychological health of the participants were that they were told they could terminate participation or decide not to answer any questions during the interview or in the narrative. No changes or alterations

were made to the usual therapeutic riding lessons themselves. It was explained to the participants that confidentiality would be ensured. No minors were involved in this study. Interviews took place in an office with a window and an open door at the therapeutic riding facility or in a public library. After the interview was completed, transcribed, and analyzed, the participants were asked to look over the transcripts, and any changes they felt were necessary were made. This study was not expected to cause the participants distress, and attempts were made to make the experience as pleasant as possible.

The procedures used to ensure anonymity of participants included self-selected pseudonyms in any reports. No client names appeared on any data. Identifying characteristics were disguised in final reports, and participants had the opportunity to do a member check concerning the interview transcription and analysis.

Only the researcher knows the names and corresponding pseudonyms of the participants. For confidentiality of data, all paper data are stored at the researcher's residence. Written records and audiotapes are also secure and stored in the researcher's residence. In terms of the final disposal, all narratives, written documents, notes, and audiotapes will be destroyed 5 years after the completion of this project. Appendix F includes sections B-F from the ethics submission and Appendix G includes the research ethics board approval and the expedited review approval.

Summary of Chapter

This qualitative, grounded theory study explored the learning and recovery process of therapeutic riding for people with disabilities as perceived by the providers at a therapeutic riding facility. Participants in the study included an executive director, an

occupational therapist, 2 instructors, and 2 volunteers and summer employees at a therapeutic riding facility in southern Ontario. Data collection used in this study included a narrative reflection, interviews, the researcher's journal, field notes, and written documents. Data analysis, methodological assumptions and limitations, efforts to establish credibility, and ethical considerations were explored in this chapter.

CHAPTER FOUR: FINDINGS

This chapter provides an overview and a summary of the findings of the study. Grounded theory generated by the study is described. This study explored the learning and recovery process of therapeutic riding for people with disabilities as perceived by the providers of therapeutic riding.

The study addressed the question: What theory explains the process of therapeutic riding as an experiential and holistic approach to learning and recovery for people with disabilities? This large question was separated into smaller, more researchable questions that provided the framework for the study. The following questions guided the selection of data collection and analysis techniques, as well as the presentation of the findings.

- What are the goals of therapeutic riding?
- How are the outcomes achieved? What are the major events or benchmarks in the process?
- What are the outcomes?
- Who are the participants? What are their roles?

The Learning and Recovery Process: Team Relationships

The central theme in the findings was relationships. Relationships were explored in terms of the universal dynamics of the team relationships; the horse and rider relationship expressed through the mind-body connection; and the providers and rider relationship used in the rider-centred approach. These concepts, in addition to the individual aspects of the rider, the horse, and the providers, were explored.

Universal Dynamics of Team Relationship

Therapeutic riding is a team activity that involves many significant participants. The team may include a horse, a rider, an instructor, a therapist, and volunteers. Additional staff helps in the running of the facility, such as an executive director, an equestrian director, and a stable manager. At the therapeutic riding facility used in this study, participants include the executive director, an occupational therapist, 2 instructors, and 2 volunteers and summer staff.

A triad of the relationship among the horse, rider, and providers needs to be in place for the learning and recovery progress for people with disabilities to occur in therapeutic riding. I have chosen to use an integrated diagram (Figure 1), to visually represent this relationship. Within this diagram, the dynamics of the team are explored. Certain universal dynamics of this triad must be in place for the relationships to function properly. These include pleasure, respect, adaptation, and safety.

Pleasure

Therapeutic riding must be pleasurable for all involved, including the providers, the rider, and the horse. "I am so proud and happy to be able to facilitate these accomplishments" (Karen, Narrative, Sept. 15, 2001). This pleasure may aid in the motivation for the whole team to continue participating in therapeutic riding. "I realized then that the rider and I had formed a bond. I really looked forward to each day the rider was coming, he was always so happy and always smiling" (Cindy, Narrative, Sept. 29, 2001). "Horses are important because it makes therapy a team effort... the horse is helping you with your therapy, but they're not seen as therapy, they're helping you with playing a game" (Sonia, Interview, Oct. 8, 2001). Pleasure is particularly important for a

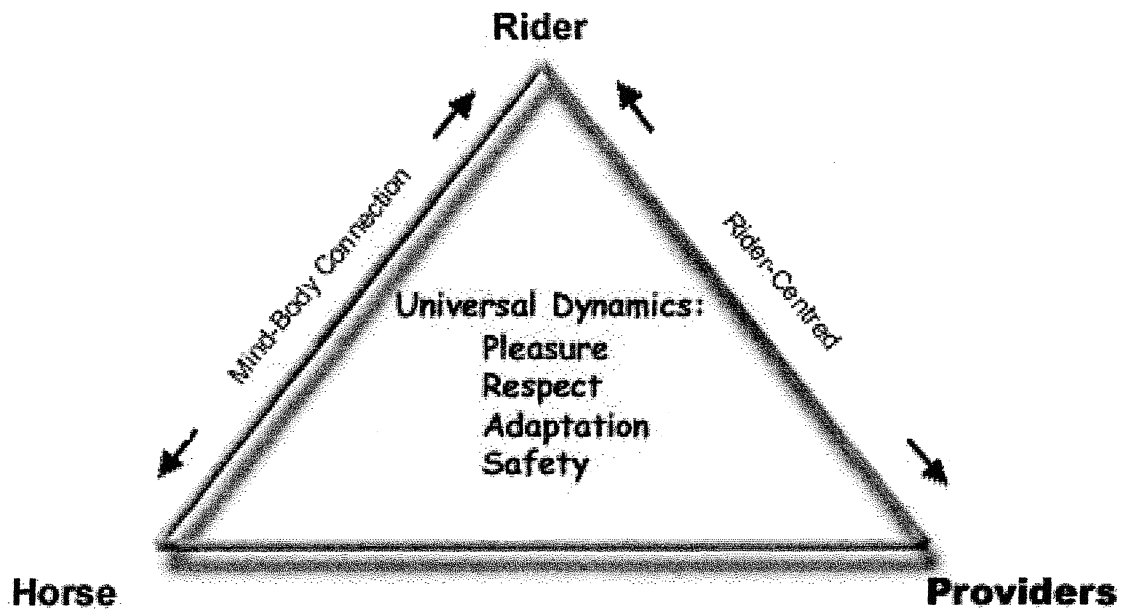


Figure 1. Triad of team relationships.

rider in continuing to be involved in therapeutic riding and volunteers who are not paid for their work.

Respect

All team members must respect one another. Providers must respect the needs and limitations of the rider and of the horse. The horse must also respect the provider and rider in order for the program to run smoothly. The rider must respect both the providers and the horse. "This was a primarily educational task at first, to expose the riders to the horse keeping side of riding, but it become a big lesson in responsibility, respect, and reciprocity" (Sonia, Narrative, Sept. 27, 2001). Part of respect is being able to trust each other. Trust is an essential component in therapeutic riding particularly, because it is a risky activity. "He needed to trust the volunteers for his safety and to have his best interest in mind. He needed to learn to trust people beyond his family because his trust in the medical profession was not proven" (Mandy, Narrative, Oct. 8, 2001).

Since a horse is a prey animal and subsequently a flight animal, having a person on a horse's back makes it harder for the horse to run away if threatened. Thus, a horse must respect and trust the rider to ensure the horse's safety. The bond between the horse and the human is essential at all times for therapeutic riding to progress, as the horse's cooperation is essential. Trust and respect particularly need to be in place for the providers, with whom the horses would have most communication, until the rider becomes more independent.

Adaptation

All team members must be adaptable with one another. "It's such a learning environment for everyone and you have to be very adaptable and flexible" (Lee-Ann, Interview, Oct. 30, 2001). Providers must adapt the program to fit the needs of the client and horse. "You're adapting to each rider who may communicate differently...you have to be very adaptable and flexible and even the horse understanding the different signals that riders are giving them" (Lee-Ann, Interview Oct. 30, 2001). "Because we deal with people with disabilities, we have to be very open and flexible" (Sonia, Interview, Oct. 30, 2001). The horse must adapt and accommodate different riders. A rider must adapt to changes in the program and setting.

Safety

Providers must ensure that therapeutic riding takes place in a safe environment, which includes the behaviour of the horse. "There's more than just to physically support the riders so they don't fall. I don't think that's the most important, well obviously safety's first, but I think their [side walkers] most important role is the social role" (Karen, Interview, Oct. 16, 2001). The horse and rider must both feel safe in order for therapeutic riding to take place. "Those side walkers are so important to give them [riders] security...and the trust you have and you felt comfortable with your instructor so you're willing to take that risk" (Cindy, Interview, Oct. 23, 2001)

Team Matches

Team matches among the rider, horse, and providers are also an important component. There are “varied differences among providers, their approaches, and their experiences with horses” (Journal, July 16, 2001).

We have a lot of instructors with very, very different personalities and different approaches. Some people are friends to their rider, some people are very warm, supportive type, very motherly, or very grandmotherly...some people are military in their format.... You're a result of what you've been taught as an instructor, and then that's what you give your student and it either works or it doesn't. I mean, I might have the skills to teach you exactly what you want to know, but if personally we don't like each other that can be a big thing. (Sonia, Interview Oct 30, 2001)

Furthermore, the matching of team members is highlighted in the next quote.

It's just people's connection. Some people just don't click, some people click really well. So, it's a matter of matching up riders with appropriate side walkers. It's amazing, that's why I try and put such an emphasis on side walkers. I know some people don't think it's that important, but it really is, and it's going to make or break the rider's experience. (Karen, Interview, Oct. 16, 2001).

Horse and Rider Relationship: Mind-Body Connection

Part of the team relationship includes the connection between the horse and the rider. “The horse-human bond is something unique. Man and horse have had a unique relationship throughout time, and we used them primarily to get around” (Lee-Ann,

Interview, Oct. 30, 2001). A therapeutic riding horse must have certain characteristics to be effective. A horse helps make therapy and education a team effort, even if no human assistance is required. A horse's responses are learned through interactions with others, similar to humans. This can be learned by repetition. "They're just incredibly intelligent; one thing is they learn by repetition. So riding is being able to provoke, and know how to provoke, a desired response with the least trauma to the horse, and then they just learn the instant you get the response, you stop provoking, show them the cause and effect" (Sonia, Interview, Oct. 30, 2001).

Since a horse's response is learned, humans may teach a horse to go against his or her instincts. This may include tolerating people and objects on their backs and objects in their mouths. "All their instincts are against what we ask them to do. We ask them to tolerate people on their back, we ask them to put things in their mouth, to be tolerant" (Sonia, Interview, Oct. 8, 2001).

For a rider to have a relationship with a horse, the rider must understand the socialization of horses. A horse is also a social animal that gathers in a herd, and within this herd there is a hierarchy. "It's like the whole pecking order. Where we belong, and sometimes we might belong at the top of the pecking order and other times we learn not to be. Where we need to be bullied or the follower. We need to be able to adjust" (Mandy, Interview, Oct. 8, 2001). Humans also fall into a horse's social hierarchy, perhaps without the human necessarily realizing this. Each member of a group has his or her own role or position. A leader may be strong, powerful, and help in the protection of the followers.

In the beginning of this study I had attempted to separate the physical aspects of therapeutic riding from the learning and recovery aspects. This was reflected in my interview questions, which I quickly adapted during the first interview. The participants in the study had difficulty responding to questions in reference to either the mind or the body, and instead incorporated them together. Therapeutic riding involves a mind-body relationship to achieve goals. "I think the horse is quite a unique animal. The fact that you can actually use the physical side of the horse and all of those areas like sense of control and sense of empowerment" (Lee-Ann, Interview, Oct. 30, 2001).

You can understand just a little more about the physical condition, and together it's amazing how closely they're interlocked [physical and psychological]. That's exactly what being on a horse does, because if you're doing regular therapy you can't actually isolate what the emotion is very well. (Marie, Interview, Oct. 25, 2001)

There is a holistic connection that a horse provides through the physical act of moving with the rider. Even for a rider whose primary goal is to heal physically, emotional and psychological aspects of the rider are essential in the process.

A rider's emotional state had a very negative impact on her physical abilities and all of her impairment became heightened. It was obvious that in order to meet physically based therapy goals we first had to work on increasing her confidence. (Lee-Ann, Narrative, Sept. 27, 2001)

Furthermore, a rider with a mental or an educational goal also uses his/her physical body to achieve his/her goal. "I think it's important that some of the methods are that you teach to all the senses and that way they can live the experiences as opposed to assume it, or

not be able to use all their senses because maybe a sense they're missing or diminished that they can't rely on" (Mandy, Interview, Oct. 8, 2001). Thus, the mind-body relationship and bodily awareness were found to be essential in the learning and recovery process, which could not be separated in therapeutic riding.

That sort of comes back to the whole theory of occupational therapy. It's a very holistic profession; you look at the entire person because you can't just separate a person into components. Physically it's going to affect you mentally, it's going to affect you physically, it's going to affect you emotionally, behaviourally, and it's going to affect you. All of those things. (Lee-Ann, Interview, Oct. 30, 2001)

The programs in the United States have tended to take an either mental or physical focus, and even the facility in this study has an explicitly physical and cognitive focus, yet takes into account the psychological and emotional aspects of the riders.

There's specific therapeutic riding centres that specifically are for mental health issues...I think that the carryover from physical benefits has been studied more and that people have done more research on the physical...I think anyone with a disability tends to have some psychological issues as well because of the barriers that have been put forth to them... The fact that we want to have people to be more independent, so that it does have carryover into the psychological effects, that of being able to do something as opposed to being told you can't. (Mandy, Interview, Oct. 8, 2001)

Providers and Rider Relationship: Rider Centred

A cornerstone of therapeutic riding is that it is rider centred. The term rider-centred is used for simplicity, but it includes the client-centred approach and the student-

directed learning or individually configured education. This approach means that the rider is in control of his or her learning or recovery process. "Therapeutic riding is a client-based program where the client participates in the assessment, goal setting, achievements, and evaluation process" (Mandy, Interview, Oct 8, 2001). Being client centred "means that the client has control over therapy. So, they come not because anyone has told them to come.... We establish goals together, whether I'm discussing it with their primary caregiver if the person is not able to speak for themselves, or with the rider, we establish goals together" (Lee-Ann, Interview, Oct. 30, 2001). Thus the goals, process, and outcomes are a collaborative effort with the rider in control. Thus, the relationship between the rider and the providers is essential to facilitate a rider-centred approach. "Just letting them know it's okay if you don't want to do it today, we work on it next week. Taking it at their pace, you know, and letting them know it's okay" (Cindy, Interview, Oct 23, 2001). Thus, therapeutic riding may also be adapted to meet the needs of different individuals and cultures due to its individualized nature.

In relating to a particular rider a provider wrote,

I would only suggest walking on when she was relaxed, calm, and prepared to do so. I also provided opportunities for her to discuss with me at the end of the session what she liked best, what she was most proud of, and what she would like to try next week. (Lee-Ann, Narrative, Sept 27, 2001)

A rider chooses to participate in therapeutic riding and work towards goals at his or her own pace. Providers must accept and respect this in order for learning or recovery to take place.

The Rider

When potential riders arrive at the facility, an assessment must take place to explore the needs of the riders and the appropriateness of class placement. Riders tend to be placed in a class with riders of similar goals and ages. “We want to be aware that someone’s placed in the appropriate class, that they’re placed in a class with riders of similar ages and similar goals” (Lee-Ann, Interview, Oct. 30, 2001).

In terms of riders who are appropriate for therapeutic riding, almost anyone may be appropriate, but there are certain contra-indications that are kept in mind at this facility. “We have a list of contra-indications, so I can tell you riders that are not suitable for riding, and that helps to eliminate who can ride, because I think riding is for many people but it’s not for everyone” (Lee-Ann, Interview, Oct. 30, 2001). In terms of specific disabilities or abilities, almost all people that do not have a contra-indication, have permission by their doctor, and are assessed by the facility therapist may be accepted into the program.

People who are not appropriate for therapeutic riding at this facility include people who exceed the weight limit of 180 pounds, which is for the safety of the horse and the volunteers supporting the people. People must be at least 4 years old, although there is no upper age limit to be accepted into the program.

It is not considered therapeutic to do therapy with someone under that age [4 years old]. First of all they may not have the attention span, and to push someone beyond their developmental stage of attention...you don’t want to push them beyond that. And the other thing is their little legs, you don’t want to overextend them. (Lee-Ann, Interview, Oct. 30, 2001)

Potential riders must also be able to sit independently on the horse's back with minimal physical aid from volunteers to stay upright and not fall over. "Riders need to have independent sitting balance, they don't need full physical support from the side walkers... It could be harmful for the volunteers" (Lee-Ann, Interview, Oct. 30, 2001). An additional safety issue are people who do not have seizures controlled for one year; thus, they are not permitted to ride until their seizures are controlled. "Someone would not be suitable who has active seizures... we need to have medical forms that say if someone has seizures they need to be controlled by medications...and has none at all for a year" (Lee-Ann, Interview, Oct. 30, 2001).

In addition, "we also want to look at things like if someone has a tethered cord with spinal bifida, and we want to be careful of not damaging the cord any more" (Lee-Ann, Interview, Oct. 30, 2001). Providers need to be "careful of anyone who has conformities, which are tight contractors. Tight contractors in the legs when getting them astride the horse is actually going to rope the muscle or maybe even cause a hip to dislocate" (Lee-Ann, Interview, Oct. 30, 2001). Thus, riders have to be able to put their legs astride to a certain measurement. It is not to say that people with tethered cords or shunts cannot ride, but providers need to make adaptations. For instance, riders may not trot unless they have a letter from their doctor. This is also the case with people who have osteoporosis. "People who have osteoporosis can ride, but because their bones are more brittle I want to make sure I get a letter from their doctor" (Lee-Ann, Interview, Oct. 30, 2001). Careful considerations must be made in doing activities with these people. Furthermore, "a certain sense of cognitive awareness of a rider is also important in order for therapeutic riding to be beneficial" (Lee-Ann, Interview, Oct 30, 2001).

Therapeutic riding is potentially beneficial for any adult or child who does not have the discussed contra-indicators. "Riders most suited to therapeutic riding include riders with physical motor dysfunction, riders with degenerative conditions, riders with cognitive issues, and riders with communication disorders" (Mandy, Interview, Oct. 8, 2001). Riders with the following conditions, disabilities, or illnesses may find therapeutic riding beneficial. Riders with a degenerative condition may find therapeutic riding beneficial since riding may be a passive movement for them and one of the few exercises that do not add to their body's degeneration. Riders with cerebral palsy may find riding helpful in neutralizing tone by either loosening or tightening muscles and increasing balance. Riders with speech difficulties may be motivated to speak, and riding may help improve trunk control that aids in breathing and speech.

Riders have tended to be involved at the facility in this study that have physical or cognitive difficulties. However, people's social environment and mental health are factored into the recovery or learning process, either explicitly or implicitly depending on the individual's goals.

Riders are placed into a program based on priority. "First priority for acceptance into a program is that it is a form of rehabilitation for the individual; thus surgery may be prevented. Second in priority placement is that it is psycho-educational for the person. Lastly priority placement is for individuals who wish to ride for leisure or sport" (Sonia, Interview, Oct. 30, 2001).

The Horse

In choosing horses for therapeutic riding, important things to consider are their width, length, type of movement, temperament, and disposition. Horses should be

accepting, trustworthy, predictable, focused, willing to learn, athletic, and have a well-balanced forward motion. "The horse shows us something can be large and grand, yet still be gentle and capable of doing so much" (Lee-Ann, Interview, Oct. 30, 2001).

Horses tend not to be judgemental; a person is a person whether they have a disability or they don't. They also tend to be very empathetic in that usually the more involved a person is, the more needy a person is, the more empathetic the horse is in return, and that's something that isn't said, explained, it just happens. They tend to be kind-natured animals, their natural response is that they are not an aggressor, they tend to run away from things that are fearful. (Mandy, Interview, Oct. 8, 2001)

Therapeutic riding horses should be kind and willing to learn. They should not mind being handled by several people at a time. Characteristics of horses that make them good supports for therapeutic riding include being nonjudgmental, responsive, communicative, empathetic, sociable, and accommodating.

Therapeutic riding horses have difficult jobs since they may carry riders with poor balance and delayed reactions to movements. A well-balanced forward movement is important to provide riders with appropriate stimulation to teach them balance. Horses should also not be annoyed by the imbalance or stiffness of the rider. Horses should be able to perform various skills to meet the needs of many riders. The health and age of the horses should allow them to give many years of useful service.

Furthermore, horses must have the ability to cope with unexpected events, noises, and movements. The leader of the horses must accurately observe the horses' body language and level of stress and be able to intervene in a noninvasive and effective

manner. Horses must also be predictable so that behaviour in specific circumstances can be anticipated in advance. Horses must also be controllable so that behaviours can be restrained, guided, or managed. They must be suitable for the specific goals identified for riders. In addition, horses must have the ability to inspire confidence so that the riders are comfortable. Riders who fear their own safety may be unable to focus on achieving therapeutic goals.

Movements of a Therapeutic Horse

Horses' gait, or walk, is particularly important to ensure the experiences of riders are therapeutic and that the riders are receiving appropriate impute from the horses.

The fact that you can actually use the physical side of the horse and all of those areas like sense of control and empowerment.... Because the horse having that three-dimensional gait that at the pelvis movement of the horse simulates normal walking patterns in human, so that in itself is unique and that makes it an incredible therapy. (Lee-Ann, Interview, Oct. 30, 2001)

Horse's gaits must be rhythmical and they must be healthy and strong. The horse's walks are a three-dimensional, four-beat movement that simulates normal human walking patterns for riders. Thus, riders are stimulated as if they were walking.

Horses have a rhythmical, four-beat walk which is the way the horse's back moves when someone's sitting on their back, the rider's pelvis is at right angles to the horse's pelvis so there is a delayed response following the horse's back from front to back, and side to side, and rotational... It's the same as someone would get if someone were moving correctly themselves at a walk. It can be a very

beneficial tool to teach the person and get the muscle memory happening, observe repetitive movement. We've actually been able to teach people to walk or walk more correctly than they tend to. That's one thing, and there isn't a mechanical device that's been developed that could do that as well. (Mandy, Interview, Oct. 8, 2001)

Riders are seated at right angles to the horse's pelvis, and the response to the riders is slightly delayed after the horse's movement from the main planes of motion, which are from front to back, side to side, and rotational. Different horses may stimulate more or less movement in each plane of motion for riders, such as greater front and back movement than other horses. Different types of movement may be more or less beneficial for different riders and their goals.

The size and gait of the horses must meet the needs of the population they will serve. Horses walk at a rate of 100-120 beats per minute, whereas adult walk at 110-120 beats per minute. This is especially useful for riders who have physical difficulties where they may not be able to walk, need assistance to walk, or have an unbalanced walking movement.

Furthermore, the horse's length of stride is another important factor to consider in their use. The stride length of the average horse (14.3 to 15.2 hands) is very similar to the stride length of the human adult. Ideally, at the facility in this study, they use horses that are "14.2 to 15.3 in height, hands high to service our needs because we can't put our adults on ponies and we can't put the kids on really tall horses' cause we can't help them enough" (Sonia, Interview, Oct. 30, 2001). Smaller horses, such as ponies, may have a shorter length of stride due to their shorter height. This would result in a quicker and

more stimulating movement received by riders, versus taller horses moving the same distance. Thus, this may be more beneficial for riders that need more stimulus but may pose a problem for riders who already feel over stimulated. Thus, the range of horses at a therapeutic riding facility must be able to be used with most riders to ensure their efficiency. The riding centre in this study does not use ponies, since many adults would be too heavy and the quick movements would over stimulate many riders.

The Providers

Direct providers of therapeutic riding include the instructors, the therapists, the volunteers, and the summer staff. The instructors and the occupational therapist are provides of therapeutic riding that help riders work towards their specific goals using a specific approach from the provider's training. Other staff that help indirectly in the therapeutic riding program at the facility in this study include the volunteer coordinator, the intake worker, the stable owner, the financial advisor, the accountant, the executive director, and the board of directors at the facility. This facility also works in conjunction with other community resources such as family doctors, speech pathologists, and school teachers. In this study, I focused on the direct providers, including volunteers, student summer staff, instructors, an occupational therapist, and the executive director who oversees the whole program.

Providers at the facility in this study include volunteers who do a variety of tasks such as side walking with the rider on the horse to provide physical and emotional support if required, in addition they reinforce what the instructor has said. They are also part of the team relationship. Volunteers may also lead the horse and look after the

well-being of the horse during the lesson, in addition to the tacking, grooming, and untacking the horse before and after the lesson. There may be up to two side walkers and one leader with one rider. Volunteers may also help out with administrative tasks or special event planning. Students are hired in the summer and are paid from a grant that the facility receives. These summer employees do a similar role to the volunteers, although they have more extensive tasks and responsibilities.

Certain essential characteristics of the direct providers of therapeutic riding must be in place within the team relationship, including pleasure, respect, adaptation, and safety, as explored in the section on universal dynamics of team relationship. "People who are really upbeat and enthusiastic, positive, and encouraging, and consistent in their support techniques seem to get really good results" as providers (Karen, Interview, Oct. 16, 2001). Providers also need to be dedicated, which includes being reliant, consistent, and dependable for the horse and rider.

Roles of the Providers

There are several roles and tasks for therapeutic riding providers. This includes providers' appropriate and timely feedback and reminders to riders about their progress. In addition, providers need to be supportive and provide assurance and encouragement to the riders, along with a social role to engage riders in a social activity with other riders, horses, and providers. Documentation of the process for the riders is important to keep track of progress through rider, volunteer, staff, and clinical observation.

Ways to find out if someone's meeting the goals would be first of all clinical observation. So observing and documenting notes is really important as a

therapist. In hippotherapy, I document every single class and I do an end report....

It's also important to ask the riders themselves how they feel, to ask the caregivers...the volunteers. Very specific quantitative results help as well. They can get tangible results. (Lee-Ann, Interview, Oct. 30, 2001)

These reports may provide tangible results for riders to be aware of their progress, and they are helpful in goal assessment. Providers must ensure the safety of the riders, horses, other staff, and volunteers.

Experience and Education of the Providers

The experience and education of the providers varies greatly; some have a great deal of education and experience with therapeutic riding or horses, while others have very little experience or formal education in therapeutic riding. Lee-Ann is an occupational therapist who has "a 4 year university degree in occupational therapy and then beyond that a therapist who uses therapeutic riding techniques" (Lee-Ann, Interview, Oct. 30, 2001). Lee-Ann states that "it's actually difficult to get therapists in this environment, interesting as it is, because people see it as a speciality, and a lot of therapists don't feel comfortable necessarily using a horse" (Lee-Ann, Interview, Oct. 30, 2001). Therapeutic riding is multidisciplinary; thus, providers need to have knowledge in different specialities, such as in occupational therapy and with horses or therapeutic riding.

Many providers have training or are in the process of further training in therapeutic riding to meet the North American Riding for the Handicapped Association (NARHA) and the Canadian Therapeutic Riding Association (CanTRA) standards in therapeutic riding. Mandy, the executive director, had completed her "masters and

advanced level with NARHA... and is involved with certification by being on the certification committee. And the other baseline is to make sure you have your able-bodied instructing certifications. So right now, I have my level two with the Canadian Equestrian Federation” in addition to being certificated with the Canadian Therapeutic Riding Association (Mandy, Interview, Oct. 8, 2001).

Feelings of the Providers

Therapeutic riding providers may feel many positive or negative feelings about their work. Positive feelings may include being amazed or surprised by the ability of riders, feeling the pleasure of a strong bond formed with a rider or a horse, in addition to having personal growth and insight. “When I started out I was not very good with kids at all. It wasn’t that I didn’t like them; it was that I just didn’t know how to act around them and I found it just came with time” (Marie, Interview, Oct. 25, 2001). “It’s a constant learning experience as a volunteer and as an instructor. It’s like, okay, that didn’t work well you know, how can I change it so it’s going to benefit the rider” (Cindy, Interview Oct. 23, 2001).

A negative feeling a provider may encounter is frustration when feeling unable to help in a certain situation or with communication barriers with a rider. “It’s too bad we get frustrated and we want to get on with the lesson, but imagine what it’s like for her” (Marie, Interview, Oct. 25, 2001). Health concerns may also be an issue that providers encounter when working in an environment with horses and a barn. Providers may encounter things that they might not normally encounter, such as safety concerns or allergies to horses or hay.

Providers, particularly volunteers, may feel uninformed, incompetent, or overwhelmed with a rider's disability and be uncertain about how to help the rider work towards his/her goals. "When I first started out, I felt like I was thrown into the deep end of the water. There's very little training as a volunteer. Just a 2-hour orientation where most of it is actually focused on getting the horse tacked up and the proper leading method" (Marie, Interview, Oct. 25, 2001). All the aforementioned feelings may contribute to feeling stressed or tense. "It can be a bit stressful, cause you're always thinking about safety issues" (Cindy, Interview, Oct. 23, 2001).

Goals of Therapeutic Riding

A goal of therapeutic riding may be to enhance or expand a person's ability. "The general goal of course is to enhance whatever limitation or to expand whatever limitation somebody has. That's the most basic way of saying it" (Marie, Interview, Oct. 25, 2001). Goals may be psycho-educational, behavioural and social, physical, or equestrian. Goals should be realistic and be able to transfer over into other areas of the riders' lives. Goals are rider centred, and the process is rider controlled. Thus, goals should be individualized to the needs and wants of each rider. For a goal to be achieved, it should be success oriented.

Psycho-Educational Goals

Psycho-educational goals, are also called cognitive goals. Goals may include increasing decision making skills; organizational ability; ability to follow directions; ability to respond to requests; ability to manoeuvre the horse; planning; sequential learning; attention span; memory; orientation; recognition of symbols; understanding

colours; understanding numbers; understanding shapes; and understanding letters

(Document, Therapist's assessment form).

Cognitive goals, also referred to as psycho-educational goals, they could be things like learning colours, learning shapes, numbers, sequencing, what comes next, learning how to follow directions, how to respond to a request, how to manoeuvre their horse around. So it's not just a physical thing, planning in their minds. (Lee-Ann, Interview, Oct. 30, 2001)

Behavioural and Social Goals

Behavioural goals may include inhibiting inappropriate behaviours or increasing desired behaviours (Document, Therapist's assessment form).

Examples of inhibiting inappropriate behaviours could be biting, self-biting, self-mutilating behaviours, pulling hair, spitting, those sort of things...or encouraging positive behaviours, including social skills, like looking at someone in the eyes when they're talking to, or keeping hands down and hands quiet, not pulling hair, and just following directions appropriately. (Lee-Ann, Interview, Oct. 30, 2001)

Social goals may include socializing with peers, increasing a response to the environment, and increasing self-confidence (Document, Therapist's assessment form).

The other thing is the social skills and self-help skills that come along. Socially they have a shared experience...they depend upon people as their friends in a common role in improving them, as well as the volunteers having fun at the same time, so it's a shared experience as opposed to something being done to them.

They are able to share the love of the horses, share a lot of the aspects of the program. (Mandy, Interview, Oct. 8, 2001)

Physical Goals

Physical goals of therapeutic riding may include increasing strength, air exchange, balance, posture, flexibility, coordination, range of motion, trunk control, gross or fine motor movements, or midline displacement (Document, Therapist's assessment form).

Some examples of the physical goals would be to improve range of motion in somebody's limbs, to improve trunk control, to improve mobility in certain joints.

If they're tight in their pelvis, then the motion of the force is going to help to loosen them up, which is going to help them for walking...and just general balance and coordination. You can look at gross motor, big, movements or fine motor, small movements. And those can all be addressed while on the horse.

(Lee-Ann, Interview, Oct. 30, 2001)

Equestrian Goals

Equestrian goals may be incorporated in of any of the other types of goals.

However, in the education and therapy divisions of therapeutic riding, equestrian goals are not the main focus. Equestrian goals may include becoming a more skilled rider by acquiring skills related to riding, by learning parts of a horse, by learning parts of tack, by learning colours of horses, and by learning behaviours of horses.

Activities in Therapeutic Riding

Considerations for activities in therapeutic riding that were made included the type of equipment to be used, the length of each activity, the participants involved, and the goals of the riders. It is important to mention that a typical class cannot be identified since the activities in the lesson vary with the goals, experience, and focus of a rider. In a

psycho-educational class there are typically four horses used and thus four riders. Each rider would have three volunteers working with him or her, two side walkers, and a leader. An instructor would oversee the whole lesson. In a hippotherapy class there typically are two horses and two riders, again with three volunteers per rider. However, there are also two therapists so that each rider has individual attention with a therapist. Thus, it is difficult to describe in detail what a lesson from each division of therapeutic riding may look like, whether it is education, hippotherapy, sport, or leisure. I have described the psycho-education class that is most relevant in this study and that I have encountered most often at my research site.

“In psycho-educational classes riders work towards becoming independent riders” (Journal, March 2, 2002). This is not necessarily the case for all types of therapeutic riding, although riding skills are used as tools to achieve other goals. This is where the expertise of the facilitator of the lesson comes in and varies among professionals such as instructors and occupational therapists. For example, in a hippotherapy class, the focus may not be on becoming an independent rider but on achieving specific physical or mental goals such as increased self-confidence or mobility of a limb as facilitated by the occupational therapist or physiotherapist.

It is important to mention the use of adapted equipment available at this centre that included a mounting block with a hydraulic lift to elevate riders so that it was less difficult to mount; a motorized chair-lift for riders who needed additional assistance with mounting; and adapted tack such as ladder reins and loop reins for riders who had difficulty using reins. In addition, riders may have used a saddle or a vaulting girth

depending on their abilities, their goals, and their riding position (Field notes, Oct. 29, 2001).

“Riders may use a wooden horse to practice mounting and dismounting or to prepare their body and mind for riding” (Journal, July 21, 2001). Most lessons began with three volunteers working with one rider and one horse. A volunteer led the horse, and it was his or her job to look after the well-being of the horse. The other two volunteers side-walked the horse and rider, providing either physical or mental support depending on what was needed for each rider. “The leader of the horse may groom and tack the horse and then warm up by walking around the arena” (Journal, July 2, 2001). Then the leader and the horse got ready for the rider to mount on top of the horse. This was usually done at the mounting block specially designed for disabled riders, which included a hydraulic lift. The instructor and assistant, if required, assisted the rider in mounting the horse. “Then the team moves forward and stops so that the side walkers may now take over in addition to making sure the tack is good for the rider, which may include adjusting the stirrups so that they are at a good length for the rider’s legs to balance properly” (Field notes, June 14, 2001). Now the team began walking around the arena while the other riders were mounted. This process was generally the same for all classes at this facility, regardless of the therapeutic riding focus.

When all riders were mounted, the instructor joined the group in the ring and the warm-up began. The warm-up may have included the rider doing stretching exercises while the horse was walking in a circle. The progress of the lesson may have followed a similar pattern to most physical activities. There may have been a warm-up that included stretching, and then new skills were taught or old ones performed. Some games may have

been incorporated into some aspects of the lesson. The instructor may have taught the rider how to assume a position as near as possible to the correct posture of a rider. Riders learned basic commands or communication with the horse, such as “walk on” for the horse to walk forward or “whoa” for the horse to stop. “In addition to this verbal communication, riders learned to use their leg controls by squeezing their heels on the horse’s barrel, or sides, to move forward and use the reins to stop and turn left or right” (Journal, Aug. 20, 2001).

Progress of a rider may not have been formally assessed from lesson to lesson, but in phases. The object of the first lesson may have been for the horse and rider to become familiar with one another so that they develop a relationship. In addition, the instructor or therapist reevaluates the tack used so that it is appropriate for the rider.

The rider may have been encouraged to take his or her hands off the saddle or vaulting girth rings. “When the rider’s seat becomes independent of support by his or her hands, the reins or adapted reins may be used to steer the horse” (Journal, Aug. 14, 2001). At this time, the reins may not have been attached to the bit in the horse’s mouth, since the rider may not be proficient in the use of them and it could become bothersome for the horse. Thus, the reins are attached to rings above the bit on the halter so the horse can still respond to directional movement. Once the rider was proficient in using the reins, the reins may have been put on the bit for better responses from the horse. The rider may have been taught about the use of leg aids to move forward and in a particular direction.

A fully independent rider would not need any volunteers for support or safety, would use the reins on the bit for directional movement and stopping, would use leg aids to move forward and in directional movements, and would have an

independent riding seat. Once this is mastered at a walk, then a trot can be attempted, perhaps with more volunteer support for safety at first. (Journal, Aug. 21, 2001)

At the end of the lesson there was a cool-down for the whole team, especially the horse and rider.

This may include walking at a slower pace, doing a game, or going on a trail if the weather is favourable. Then the rider dismounts, either in the arena or at the mounting block, depending on the rider's abilities. The horse is led back to the stable by the volunteer, untacked, and put back in the stall. (Field notes, Oct. 29, 2001)

As a rider became more skilled and confident in learning independent riding skills, fewer volunteers were required. At first one side walker would be taken away, then both, and then the leader. When the leader would not be needed, this would mean that the rider was fully independent at this point and was able to ride safely on his or her own.

How Outcomes Are Achieved for Riders

Figure 2 shows a visual representation of the learning and recovery process of therapeutic riding for people with disabilities. It incorporates what is needed for the process to begin and for goals to become an outcome. The time taken to achieve these goals is individualized and may continue in a circular pattern until achieved or reevaluated. Once this is done, then a new goal may be developed and worked on. Goals build on previous goals.

Motivation

Horses may have provided motivation to work towards outcomes. “Horses are used for motivating learning and teaching because riders are motivated and stimulated to learn and they are surrounded by assistance from the volunteers in such a supportive environment” (Mandy, Interview, Oct. 8, 2001). “For some people riding may be something they are very proud of and enjoy talking about it, and thus may want to continue doing it. It’s motivating, it’s stimulating, and it’s something that people can go and brag about doing” (Lee-Ann, Interview, Oct. 30, 2001). It is important to note that an attraction to horses, or at least not an aversion to horses, must be in place for the team involved. Riders must not dislike horses since a strong aversion to horses may hinder the learning or recovery process. “I think therapeutic riding attracts people who like horses. I think the horse part of it is what attracted me, and then once I started working with the kids, both parts of it [the horses and the children]” (Karen, Interview, Oct. 16, 2001).

This rider-centred approach may be particularly effective with riders who have an aversion to therapy or education. Clients may feel that therapy is painful when they lift weights to gain back muscle strength or do stretches to increase the range of motion in a limb. Perhaps they are bored with doing therapy for many years, or they need something new as motivation to continue therapy.

The people who are ideal for riding as therapy are people like the very young who don’t follow directions well, they won’t do repetitions exercises like arm curls or leg strengthening. It’s boring and it’s therapy, and it hurts, and who wants to do that? Or the older people who spend a long time in therapy and they’re jaded.

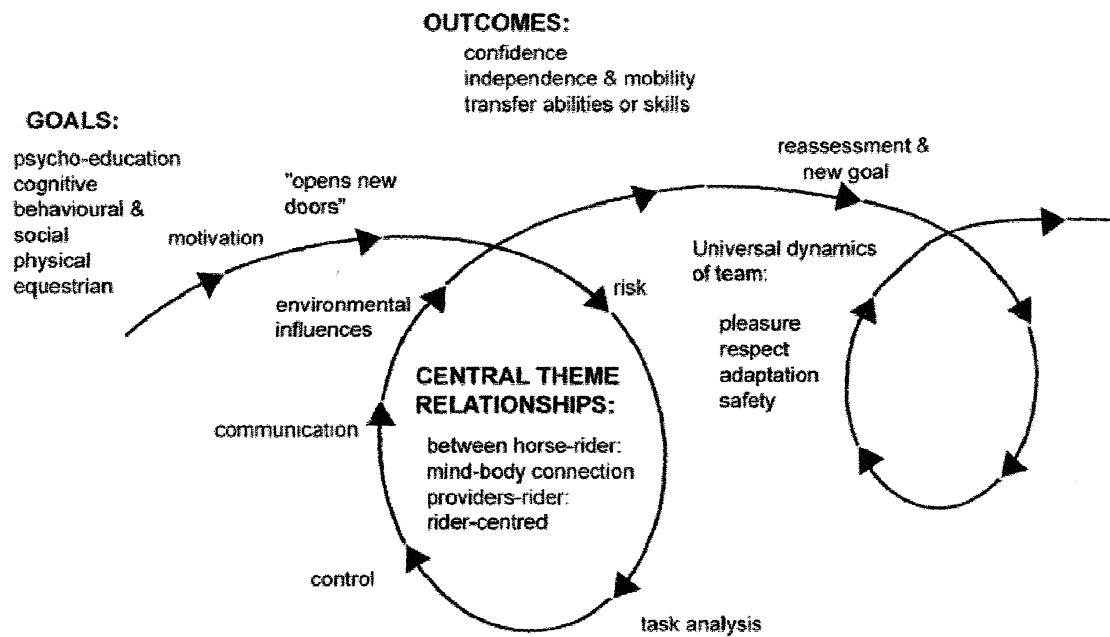


Figure 2. The process of therapeutic riding.

Because it doesn't come across as therapy. It's riding to them. (Sonia, Interview Oct. 30, 2001)

Some clients may not enjoy therapy or the sterile atmosphere of clinics or hospitals where it often takes place. Since therapeutic riding is different from many other therapies, people may be motivated to work on goals at a stable. "People who usually like animals and cannot tolerate the sterile atmosphere of clinics or are afraid because they've been in the hospital and been hurt too many times to work well in a sterile environment" (Sonia, Interview, Oct. 30, 2001)

Students may also be averse to more traditional forms of education. It may not be individualized enough for their needs, they may have had negative experiences that prevent them from fully benefiting from school, or they may not be motivated to learn or do work. In therapeutic riding, goals are individualized towards students' needs, and students take part in establishing these goals instead of goals being imposed on them. Students in therapeutic riding may be in a new environment in which they may not have any prior negative association to hinder the learning process. Wanting to understand horse behaviour and being able to communicate with a horse may motivate students to further develop other abilities or intelligences and communication skills. "It is also as a motivational tool because they enjoy the riding as well, so I think it's a bit of a kick start to wanting to get the job done and it kind of opens up people's minds to being more receptive with being taught" (Mandy, Interview, Oct. 8 2001).

People may take on new identities as riders when involved in, or having completed, a therapeutic riding program. "Many riders dress so that they are perceived as a rider" (Sonia, Interview, Oct. 30, 2001). Furthermore, visible aids that people may use

for mobility may not be needed while riding, so people's disabilities may be less visible. Riders themselves and others may no longer see them as disabled, but as riders. This may open new doors to people's perception of themselves in addition to the way others perceive them. It may help with the stigma that people with disabilities face.

"Opens New Doors"

This in vivo code, which was taken from the words of the participants themselves, "opens new doors," was repeated many times in the data to refer to the initial stage of coming to the facility and many stages within the process of learning and recovery. "Making a step into a new environment has an impact. It's a new door that's opening, or it's something scary and they have to get over that fear" (Mandy, Interview, Oct. 8, 2001). Before people first walk through the door of the facility, a great deal of thought may be put into the idea of making a change in their lives and opening a new door. "The environment needs to be very positive. Everyone needs to believe in the rider's abilities, not their disability, and it needs to come across the instant you come through the door. The atmosphere is one of achievement and positive influence" (Mandy, Interview, Oct 8, 2001).

Once people open the literal door of the facility, several pieces must fall into place before they can begin the therapeutic riding program. They must have a doctor's note letting the providers know that their doctor has approved them to be involved in therapeutic riding. They must have reliable transportation or a support system to help them get to the facility. Thus, several doors must be opened before they can even begin taking part in therapeutic riding. "The confidence to do, the sense of achievement of the

whole team and themselves, which then gives pride, and hopefully that will open other doors to everyday life situations... so they can take those same steps and apply to something totally, completely different outside riding” (Mandy, Interview, Oct. 8, 2001).

Risk

Therapeutic riding involves taking risks. Risks are involved when people make changes their lives without necessarily knowing what the outcomes will be. Risks are involved in trusting the horse and the providers with their safety and well-being.

I wasn’t really sure that they could get on a horse. I was sort of afraid at first, and my confidence has really built as a therapist, so, and it’s really opened my mind to see how much people are actually capable of...I can’t imagine that these people can get on a horse and they did, and they rode, and they sat up beautiful. And it really was incredible... it humbled me in a certain sense, in that I had a greater appreciation for really what people were able to do. (Lee-Ann, Interview, Oct. 30, 2001)

One rider needed to “increase her sense of control in a risk-taking situation, and hence increase her self-esteem by including her in lesson planning” (Lee-Ann, Narrative, Sept. 27, 2001). There is a risk to be taken in working with large animals that cannot completely be controlled and therefore the client has to willingly want to take part in the activity. Thus, it is a risk for the riders and providers being near horses whose behaviours cannot always be predicted. “It’s something that inspires them because it’s considered a risk sport; that’s probably the only daring thing in their life that they feel they’re allowed to do” (Mandy, Interview, Oct. 8, 2001).

Task Analysis

The process of therapeutic riding involves task analysis, particularly in the psycho-educational division. This is a learning approach used by instructors at the facility in this study. For example, for an instructor, “task analysis of every component of the class content is done” (Mandy, Interview Oct. 8, 2001). Task analysis involves breaking down goals into smaller, attainable increments that are dependent on the individual.

You take the goals as an instructor and incorporate the therapy goals. So you have to then take your tasks that you’re going to ask of people and do task analysis.

From task analysis, you break everything down in very small increments that are achievable and then look at what you need to do therapeutically to make those things happen. (Mandy, Interview, Oct. 8, 2001)

Thus, if riders want to learn to become independent riders so that they would not need the assistance of others, there are several pieces they must learn. This includes using the correct seat position, reins, leg aids, and rules of the ring. The order and length of time spent on each task would depend on the way in which riders learn and the time needed for each activity. Thus, the riders and the team must work together on tasks and evaluate the tasks.

Control

Control is strongly related to the rider-centred approach used in therapeutic riding. Riders are given control over their goals and the whole process. Control is also related to confidence and a mind-body relationship. For one rider, by “increasing her self-esteem through providing her with a greater sense of control, and by promoting relaxation, she

was eventually able to gain improvement in all of her physical goals within ten weeks” (Lee-Ann, Narrative, Oct. 30, 2001).

Riders are in control of the team, including the horses. “It gives people a sense of control to be able to control an animal that is that large, and that a huge, overwhelming animal is now doing what you’re asking it do is really quite remarkable” (Lee-Ann, Interview, Oct. 30, 2001). This is not to say that beginning riders would be given full responsibility for directing and pacing the horse, but these riders can work together with the team to define how much responsibility the riders are ready for. Eventually the goal may be for riders to have full control over their horse, to become an independent rider, and no longer needing the providers. In giving the riders control over their own process, they may become empowered to achieve their own goals. “The reins have so much meaning involved. For a person who doesn’t have control but wants it, reins mean so much” (Marie, Interview, Oct. 25, 2001). Being able to control the direction, pace, and movement of horses may embody a lot of meaning and power for riders.

Communication

In therapeutic riding, communication is essential among the team, and particularly between horse and rider. “It’s so much to have an emotional relationship with an animal and be on the back at the same time and communicate” (Marie, Interview, Oct. 25, 2001). Riders may use language or signals to communicate their desires and to influence the horses’ behaviours. Horses are trained to react to voice commands such as “walk on” to move forward and “whoa” to stop. Experienced riders may use their reins and legs to communicate these same desired actions to the horses, but these are skills that take a great deal of practice for many riders.

Thus, riders may use verbal and nonverbal forms of communication in therapeutic riding.

I think what's so unique about horses is they also teach us about nonverbal body language. And we have many riders who are not able to communicate verbally. We also need to be aware of the horse's body language. I think people who can understand horse language and nonverbal body language also have a greater ability to understand nonverbal body language in people. I think it also gives nonverbal riders a common bond that they have with the animal. (Lee-Ann, Interview, Oct. 30, 2001)

Riders may be motivated to communicate due to a desire for the horses to move in a particular way.

If you can get people to improve trunk control and their stamina, then it helps with getting air into their lungs and the air out, which is related to speech. So as soon as they can breathe better and be stronger through the respiratory system... then that helps with the projection of the voice and speech and getting words out and enunciation is carried over. (Mandy, Interview, Oct. 8, 2001)

Environmental Factors

It is important to mention the immediate environment required for therapeutic riding to take place. For many people, therapeutic riding takes place in a very different environment than they may be used to or have ever encountered. "The facility in this study is in a large park with many trails. It is in a city and is distinctively a stable" (Lee-Ann, Interview, Oct. 30, 2001).

The stable must be appropriate for horses, staff, volunteers, and riders. Changes may be made, particularly to the arena, to adapt and make classes more individualized and to have an appropriate amount of stimuli depending on the needs of the participants. “We have to make sure that the environment, say for someone with sensory issues or focusing issues, we have to make sure that the environment is not too stimulating” (Lee-Ann, Interview, Oct. 30, 2001).

Since it is a stable, smells, sounds, and the feel of things may elicit different responses from people from, being comforting to offensive. “The environment is already full of sensory experiences...I also adapt the environment for the individual” (Lee-Ann, Interview, Oct. 30, 2001). “The physical environment, our ring, is very plain. There’s another arena at another facility where one whole wall is a giant mural. That kind of brilliant stimulus can be really hard on riders who are over stimulated really easily” (Sonia, Interview, Oct. 30, 2001).

The environment must be accessible for people of all abilities and disabilities. “The need for accessibility, you need to be able to get into the building. Accessibility doesn’t just mean having a ramp if people are locking their bikes to the ramp. Those things have to be working to be available” (Lee-Ann, Interview, Oct. 30, 2001).

Therapeutic riding includes a great deal of consideration of the equipment used by riders and horses, such as different types of helmets, reins, saddles, vaulting girths, saddle pads, sheepskin, stirrups, a mounting block, and a hydraulic lift. This facility “is the most current, up-to-date centre around I know, there’s another place but they don’t have a hydraulic lift or a therapist. I think it’s kind of funny that they call it therapeutic riding but there’s no therapist around” (Karen, Interview, Oct. 16, 2001). Horses, staff, and

volunteers must be trained, comfortable, and knowledgeable of these pieces of equipment to ensure the safety and appropriateness for all involved.

Outcomes of Therapeutic Riding

Goals are success oriented so that riders are given the opportunity to succeed and accomplish goals. “They know they’ve done a good job because they’ve accomplished something, so there’s a real tangible accomplishment that can be seen by themselves, felt by themselves, and also that effect that it can be repeated” (Mandy, Interview, Oct. 8, 2001). If riders are having difficulty achieving goals that were set out, goals may be reevaluated and changed so that the riders may achieve them. “If the goals are not being met, then you need to go back and you have to reevaluate that and maybe grade that activity so that the goals can be met in smaller increments” (Lee-Ann, Interview, Oct. 30, 2001). “The goal becomes an outcome when fear and frustration are let go and when self-esteem is increased. Poor self-esteem causes great emotional and physical stress on an individual and can greatly affect their ability to successfully carry out an activity” (Lee-Ann, Narrative, Sept. 27, 2001). Task analysis needs to include reassessment so that the increments of tasks may be smaller, more manageable, or given a longer time frame.

I think that progress for everyone is very different. And how progress becomes the outcomes is completely different for many different riders...I have developed more patience and realizing that progress will eventually come but I don’t need to see it immediately. Sometimes there’s progress in areas that we don’t always see in this environment. (Lee-Ann, Interview, Oct. 30, 2001)

Some providers, through their own riding experiences can relate to the feeling of accomplishment riders may experience. “I know how it makes me feel being on the horse, you know it’s a really big accomplishment” (Cindy, Interview, Oct. 23, 2001).

Independence and Mobility

Increased independence in therapeutic riding may be gained through increased mobility while riding and perhaps even while not riding.

They’re sitting on top of four strong, huge legs, so they’ve got strength below them. They can go places that even a wheelchair or a human can’t go. Other things would be the fact that they’re physically above everyone else. So if you’re someone who’s in a wheelchair and you’re physically lower than everyone at all times and always look up. You can see the dynamics that sets up. If you’re looking up at people then you’re constantly feeling inferior. (Lee-Ann, Interview, Oct. 30, 2001)

Riders may feel an increase in their freedom due to less dependence on others and aids.

What is often missing in their lives and what really does separate them as much as we try to draw in inclusion, is the lack of spontaneity. They won’t be able to be spontaneous because they’re always relying on somebody else. That’s why in all goals I’m trying to establish more independence as much as possible. (Lee-Ann, Interview, Oct. 30, 2001)

A rider may “become the driver as opposed to the passenger” (Mandy, Interview, Oct. 8, 2001). This may connect to the self-confidence that may be gained by riders due to increased independence.

People that are often in a wheelchair may lose confidence and self-esteem because they are very dependent on other people for their mobility. Whereas when they learn to ride and can initially be in control of an animal, or even the fact that they're all of a sudden not below everyone else's height... as well as the mobility that they can get from going a to b under their own will. (Mandy, Interview, Oct. 8, 2001)

Becoming independent riders is related to being more independent, which may transfer to other areas of riders' lives. The process of becoming independent riders has many steps and requires a great deal of time. This process is greatly individualized, and small accomplishments can take place to work toward bigger goals. Task analysis breaks down tasks into smaller, more achievable increments so that each step may proceed slowly and riders may focus on a less overwhelming task.

The process riders may go through to become independent riders may include learning to sit properly on a horse, knowing how to hold the reins and how and when to use them to move in a desired direction, and using legs to signal a change in motion. "Sitting independently leads to further independence, on and off the horse" (Mandy, Interview, Oct. 8, 2001). In addition, steps to becoming independent riders include applying hands and legs appropriately, as well as constantly and correctly reacting to the spontaneous things that horses may do, such as speeding up or getting too close to other horses. In addition, riders need to apply rules of the ring, such as spacing between horses and being aware of the external environment related to the horse.

You need to learn how to hold your reins and then use them so you can stop, go, and turn. You need to learn to use your legs as well, and then you need to be able

to apply those aids consistently and correctly, and then you need to start reacting to your horse and to the spontaneous things that happen. (Sonia, Interview, Oct. 30, 2001)

Furthermore, becoming independent riders means allowing the leader of the horse to do less work so the rider takes on more. It includes working with more challenging horses and being forced to interfere with the horse's behaviour when required. Eventually the leader no longer uses a lead rope and no side walkers are needed. "You're independent when you will not relinquish your role of being in control, you keep it all the time. And then you can start to come off the lead with someone nearby" (Sonia, Interview, Oct. 30, 2001). At this point riders would be totally independent. "All areas of independence enhance self-esteem and a positive self-image and a sense of contribution to the community" (Mandy, Interview, Oct. 8, 2001).

Confidence

When riders have been given control over their own goals and process, they may become empowered in therapeutic riding and in other aspects of their lives. "Improved confidence may be a personal growth or psychological goal of therapeutic riding" (Mandy, Interview, Oct. 8, 2001). Once riders have achieved goals, they may feel confident to take on other tasks due to previous success. "Goals of confidence and self-esteem are usually a benefit with therapeutic riding, because going from a person that is often in a wheelchair they lose confidence and self-esteem because they're very dependent on other people for their mobility" (Mandy, Interview, Oct. 8, 2001). In taking a risk by being involved in therapeutic riding and being in control of the goals, process, and outcome, riders may feel empowered after the experience and they may then gain

confidence and independence because of this experience. For instance as a rider's "self-esteem increased, her abilities to take greater risks from week to week also increased" (Lee-Ann, Narrative, Sept. 27, 2001).

Transfer of Abilities or Skills

Accomplishments achieved in therapeutic riding may be transferred to other areas of riders' lives. One provider looks at the "whole person. Looks at benefits that are gained in therapeutic riding and how those transfer to other areas of their life and their daily living and function. Primarily that's what the goals are based on, functional goals" (Lee-Ann, Interview, Oct. 30, 2001). An example is riders who increase their trunk control by sitting on the horse. These riders may be able to sit up better and have improved breathing, speech, and communication, which may aid in the riders' participation in school.

If someone can learn to sit up, then they can participate in school, they can hold their head up, and they can have a conversation with someone as opposed to relying on either a physical structure to hold them sitting up. In not being able to do that, they eliminate also the academics, they eliminate communication and interaction with other people. And it's all from trunk control. (Mandy, Interview, Oct. 8, 2001)

The lasting effects of therapeutic riding may vary depending on the continuation of therapeutic riding or the skills learned practiced in other areas of a riders' lives, the disability of the riders, and the other things riders do in their life. There may be "lifelong effects in the areas of confidence and self-esteem" (Mandy, Interview, Oct. 8, 2001). Of

particular influence is the impact of caregivers or parents in carrying skills learned in therapeutic riding to other situations. “In many cases therapeutic riding is the door opener to many other activities and life style changes” (Mandy, Interview, Oct. 8, 2001).

However, riding skills in themselves are like “riding a bike,” people may need rekindling, reminders, or support, but what their mind and body once learned may be reassessed again (Mandy, Interview, Oct. 8, 2001). Thus the “education related to horses will be learned and never completely lost, but skills that need to be kept up will diminish” (Mandy, Interview, Oct. 8, 2001).

Summary

In this chapter the findings of the data analysis revealed many essential components to the learning and recovery process of therapeutic riding for people with disabilities. In axial coding, the finding was a central theme of relationships. The components of the learning and recovery process were presented in two figures in the selective coding phase. Goals of therapeutic riding were explored and broken down into subcategories that included psycho-educational, behavioural and social, physical, and equestrian. Included in these findings of the process of therapeutic riding are motivation, “opens new doors,” risk, task analysis, control, communication, and environmental factors. Outcomes of therapeutic riding were explored and include independence and mobility, confidence, and transfer of abilities or skills. The participants and their roles were also explored.

CHAPTER FIVE: SUMMARY, IMPLICATIONS, AND CONCLUSIONS

Summary

This study explored the perceptions of therapeutic riding providers in the learning and recovery process of therapeutic riding for people with disabilities. This study moved towards developing a theory that contributed to the knowledge base of therapeutic riding; animal-assisted therapy and education; experiential education; and experiential therapy. Through moving towards developing a theory and specific findings related to practice, the study sought to provide suggestions to enhance the understanding of the process involved in therapeutic riding. In addition, the movement towards developing a theory that was generated by this study and the lessons learned during data collection are potentially useful in future research studies in therapeutic riding and animal-assisted therapy and education.

Few studies have addressed how therapeutic riding outcomes are achieved or how the therapeutic riding process actually works. In addition, animal-assisted therapy and education studies struggle for acceptance in mainstream medicine. Since animal interaction is just a small part of the life of people in therapeutic settings, it is important to know how to assess improvement, since it can be subtle, transient, or delayed (A.M. Beck, 2000). There is a need to assess the use of animals so they may be considered part of a more recognized approach to helping people with physical, mental, psychiatric, and learning disabilities (Beck).

The study addressed the question: What theory explains the process of therapeutic riding as an experiential and holistic approach to learning and recovery for people with disabilities? This large question was separated into smaller, more researchable questions

that provided the framework for the study. The following questions guided the selection of data collection and analysis techniques, as well as the presentation of the findings.

- What are the goals of therapeutic riding?
- How are the outcomes achieved for participants? What are the major events or benchmarks in the process?
- Who are the participants? How did they participate in the process?
- What are the outcomes?

The first four chapters of this document served several functions, including reviewing the related literature, explaining the study's methodology and procedures, and presenting the results of the study. Chapter One provided an introduction and overview of the topic and study. Chapter Two is a review of the literature related to the topic of the study. This chapter brought together the disciplines of experiential education and experiential therapy with therapeutic riding. Included within the section on therapeutic riding is the historical background of therapeutic riding, the divisions of therapeutic riding with a focus on the education and therapy sections. The chapter ended with research and theories on animal-assisted therapy and education.

In Chapter Three, the methodology and procedures used in the study were explicitly outlined. The study was identified as grounded theory research, and the implications of this were explained. A description of the research approach, researcher's involvement, participant and site selection, data collection, data analysis, methodological assumptions, limitations, efforts to establish credibility, and ethical considerations are included. Chapter Four provided an overview and a summary of the findings of the study. Grounded theory generated by the study was described.

This final chapter Five began with a summary of the first four chapters and then outlined the implications of this study. Based on the results of the study, suggestions for enhancing practice and facilitating further research are provided. The document ends with some final thoughts on the study.

Implications

Given the limited research on the learning and recovery process in therapeutic riding for people with disabilities, future research needs to be explored. Research on therapeutic riding can provide theoretical and empirical grounding for improved therapeutic riding and more productive use of animals in the medical and educational community. There is a need to assess the use of animals so that they can be considered part of a recognized approach to helping people with physical, mental, psychiatric, and learning disabilities (A.M. Beck, 2000). It is hoped that the results will inform practice through contributing to the development of the theoretical basis of therapeutic riding in learning and recovery.

To determine the practical uses of therapeutic riding, it was important to move towards developing a theory of how therapeutic riding could be used in learning and recovery for people with disabilities. The grounded theory tradition was selected as the method of data collection and analysis because of its potential to contribute to the development of theory. The aim of this study was to generate theory about therapeutic riding in learning and recovery that is grounded in or based upon the data.

Implications for Theory

Articulation with Existing Theory

The implications for theory as discussed below, paint to future research. Thus, the essential components of the learning and recovery process of therapeutic riding for people with disabilities is reiterated and articulated with existing theory.

Learning and Recovery Process

Team relationships. The central theme of relationships was significant in my findings. Reviewed literature focused on the outcomes of therapeutic riding and their usefulness, but not how outcomes were achieved. Thus, when the concept of relationships were explored in the literature it was mentioned without elaboration on what is needed in an effective relationship. A person-centred approach was not discussed in relation to therapeutic riding, which involved exploring the relationships among the providers and the rider. The characteristics and effectiveness of horses were explored in depth in the literature, but the reasons behind their effectiveness were not explored, such as a mind-body relationship.

The dynamics of the participants examined in this study were not addressed in the literature. The literature I reviewed looked at the rider, the horse, and the provider in more practical considerations, such as the requirements of a horse to be in a program. The team members tended to be examined in isolation and not explored as a whole group, as were done in this study. The literature I reviewed did not discuss the characteristics of an effective provider except for stating that they need training and education in therapeutic riding. There was plentiful information on characteristics of a therapeutic horse and particular movements of a therapeutic horse that corresponded with the findings of this

study. However, a great deal of the literature segmented all the individual pieces of therapeutic riding but did not focus on the universal dynamics, which this study did.

The significance of team matching was not explored in the literature I reviewed, although it was found to be an important concept in this study. If a horse is not appropriate for a rider, the rider may not feel safe or comfortable and thus be unable to work on learning or recovery goals. This is also the case for a rider who does not match well with the instructor, therapist, or volunteers.

Providers and rider relationship: rider-centred. In this study the rider-centred approach is an integral and essential part of the process. The literature I reviewed did not explore a rider-centred approach in relation to therapeutic riding or animal-assisted therapy. A rider-centred approach may be an approach that is particular to the facility or individuals in this study.

Control is strongly related to a rider-centred approach. This approach assumes that people understand their needs better than others, and it gives them power to make their own choices (Jones, 1994). Literature I reviewed did not explicitly referred to the use of control and empowerment in relation to therapeutic riding. People with disabilities may feel loss of power with some aspects of their lives. Perhaps they have difficulty with mobility and are dependent on other people. Therapeutic riding can be influential in helping people gain more control in their lives and thus feeling more powerful.

The origins of the client-centred approach may be attributed to Rogers (1951). A collaborative relationship between clients and therapists seem to be the basic element of client-centred practice. Thus, clients and therapists are seen as equal, and the therapists

may help empower the clients to make their own decisions. The therapists are not seen as all powerful and all knowing or the solutions to clients' issues; rather they are guides on a journey taken together.

Several factors have been behind the increase in use of a client-centred approach, particularly in occupational therapy practice (Jones, 1994). There has been a rise in the consumerism movement, which is especially strong in mental health (Jones). This movement involves people with disabilities who engage in consumer advocacy to regain control over their lives. A shift in the definition of health has also contributed to the increase in client-centred philosophy (Jones). There has been a move from a purely medical model, viewing health as the absence of disease, to the World Health Organization's definition of health as a state of well-being and, most recently, to an emphasis on function (Jones). Function suggests one's ability to achieve desired goals or perform certain activities, in which client involvement is explicit. This recognizes a client's influence on his or her own state of health.

Gardner (1999) regarded the theory of multiple intelligences as endorsing three components. He believes in "individually configured education," which I have also called rider-centred. Gardner believed that people are not all the same, people do not all have the same kind of mind, and education works most effectively if these differences are taken into account rather than denied or ignored. Thus, an individualized approach to education is key to multiple intelligences theory.

Horse and rider relationship: mind-body connection. Findings from this study revealed the significance of the horse and rider relationship in the learning and recovery process of people with disabilities. Some literature I reviewed also discussed the

importance of this relationship. Therapeutic riding may help in breaking down the learning process into units or tasks that are spoken or felt physically, as well as performed (Katcher & Wilkins, 2000).

A reason for exploring the mind-body relationships is that humans may dissociate from the whole of themselves. People may separate the mind from body, the instincts from rationality, and the past and future from the present. Children may be taught to focus their attention in a specific area, such as doing a math problem, without paying attention to what's going on in their surroundings (Kohanov, 2001). Horses may provide a multisensory relationship that may not be present elsewhere in a person's life (Kohanov).

The body functions as an important part of the mind, particularly in the case of emotions (Pert, 1997). Pert has illuminated the form and function of neuropeptides, information-carrying chemicals that affect emotion and the physical and psychological responses to emotion. Pert found that receptor sites for these chemical substances are located not only in the brain, but throughout the body. Therefore, emotion can be created by any organ or cell with the capacity to produce these information-carrying substances (Pert). Thus, "gut feelings" may literally be the intestines, not the brains, and are the source of these particular emotions (Pert).

Furthermore, many molecules of emotion found in the human are found in other living organisms (Pert, 1997). Even protozoa, microscopic organisms, create and process endorphins, which may induce euphoric feelings, in the same way that the human system does (Pert). This idea is a paradigm-busting scientific realization (Kohanov, 2001). Most

researchers have been trained to believe that animals do not truly feel pain, let alone happiness or euphoria (Kohanov).

In the presence of horses, humans are encouraged to have emotional congruency (Kohanov, 2001). This is because horses' survival is dependent on being able to gauge predators' presence and intentions at a distance (Kohanov). People who are emotionally incongruent, who act one way while feeling the opposite, appear dangerous to horses. Horses also have a high level of "sociosensual awareness," which means that someone else's mood can affect their physical as well as emotional level (Kohanov). There is a good reason that horses have sociosensual awareness, because if one horse is suddenly alarmed, fear sweeps through the rest of the herd, causing the whole group to run before most of them have seen what the trouble is (Kohanov).

Through horses' need for emotional congruency and high sociosensual awareness, humans may come to understand what their actions and behaviours look like (Kohanov, 2001). This allows people to make changes in their behaviour and see a change in the horse's response. Thus, the body is encouraged to reflect the mind and emotions. By tuning in to their own mind-body in order to remain congruent in the presence of horses, people may relieve the pressure of pent-up emotions (Kohanov). The powerful, practical use of this is that when people are unable to access what is going on in their own body and mind, horses will express it behaviourally (Kohanov). Thus, the people's emotions may become clear to themselves and therapists or educators working with them. By being able to access a person's mind and body, they can make changes in their behaviour and see the direct result of this in the behaviour of horses.

The field of therapeutic riding has shown that no mechanical device yet existing matches the effectiveness of horses in treating a variety of physical disabilities (Kohanov, 2001). The reason for this may be that horses act on multiple levels. Horses may relax and support the rider in such a way as to create a space for recovery and learning to occur.

Spiritual dimension. In Gardner's (1999) later addition to his first seven intelligences, he added naturalist intelligence and proposed the idea of spiritual intelligence. In this section, I am not debating for or against a spiritual intelligence; as Gardner pointed out, the moral aspects, the problematic nature of content, and difficulty with defining issues of spiritual intelligence are significant considerations. Rather, I am exploring the need to take the spiritual aspect of riders and providers into account in therapeutic riding.

Thus far in this work, there has been no reference to the spirit or the soul. In terms of exploring the whole person, the mind-body relationship has been explored, with the exclusion of the spirit. The topic of spirituality has been recognized as an important component of both physical and mental health in the last two decades (Kehoe, 2001). However, any discussion of the spirit is controversial within the scientific community, if not throughout the academic world (Gardner, 1999).

Holistic healing, alternative medicine, and a growing body of research point to a positive relationship between health and one's religious and spiritual beliefs and practices (Kehoe, 2001). Spirituality can be defined in many different ways. Aspects of spiritually

may include a sense of peace and acceptance, companionship, an ability to empathize with others, or ability to find one's place in the universe (Kehoe).

Although spiritual dimensions of learning and recovery were not explicitly studied, they are important aspects to consider. A rider's spiritual health may be nurtured within therapeutic riding. It is important to address the spiritual health of both the riders and the providers in all divisions of therapeutic riding. Perhaps further research about the spiritual aspects of therapeutic riding may provide more insight.

Goals of Therapeutic Riding: Through the Lens of Multiple Intelligences

Different divisions of therapeutic riding have different foci. Goals of therapeutic riding were explored extensively in the reviewed literature. In my findings, goals were broken up into sections on psycho-education, behavioural and social, physical, and equestrian. The focus and goals emphasized in different divisions of therapeutic riding may fit into the theory of multiple intelligences. The theory of multiple intelligences will be explored in light of the goals of therapeutic riding.

Gardner (1999) expanded his definition of intelligence in the practical application of his theory to include at least eight types of intelligences: naturalist, interpersonal, intrapersonal, bodily kinesthetic, linguistic, logical and mathematical, and spatial. Gardner also stated that he had no objection if these are referred to as talents or abilities. Gardner conceptualized intelligence as "a bio-psychological potential to process information that can be activated in a cultural setting to solve problems or create products that are of value in a culture" (pp. 33-34). Thus, intelligence was a potential that may or may not be activated. Gardner recognized that the most important contribution education

can make to children's development is to help them towards a field where their abilities or intelligences best suit them.

Interpersonal and intrapersonal intelligences. All divisions of therapeutic riding may incorporate activities for interpersonal and intrapersonal intelligence. Social and behavioural goals from the findings related to interpersonal and intrapersonal intelligences. Interpersonal intelligence denotes a person's capacity to understand the intention, motivations, and desires of other people and, consequently, to work effectively with others (Gardner, 1999).

Intrapersonal intelligence involves the capacity to understand oneself, to have an effective working model of oneself, including one's own desires, fear, and capacities, and to use such information effectively in regulating one's own life (Gardner, 1999). Gardner stressed the origins of intrapersonal intelligence in a person's emotional life. Furthermore, Gardner considered the emotional aspects of each type of intelligence. Thus, this section may overlap among the other intelligences. Goleman (1995) has expanded and explored this idea of emotional intelligence.

Bodily-kinesthetic intelligence. The physical goals from the findings relate to bodily-kinesthetic intelligence. Bodily-kinesthetic intelligence entails the potential of using one's whole body or part of the body to solve problems or make products (Gardner, 1999). Activities related to bodily-kinesthetic intelligence can be used in all divisions of therapeutic riding. However, in the sport and hippotherapy divisions, bodily-kinesthetic may be the central focus. In therapeutic riding for sport, a rider may work on equestrian

skills towards becoming a better rider. In hippotherapy, riders may work on specific goals in which a physical healing goal of the body may be the focus.

Furthermore, physical activity is a concept in the literature that is also significant in this study. Some of the physical benefits of therapeutic riding may also connect with communication, since riders who have better trunk control may also improve their breathing and subsequent ability to use speech. People who have animals in their homes have an eight times greater chance of surviving one year after a heart attack than people who do not have animals in their homes (Becker, 2002). Animals lessen stress by lowering heart rate, blood pressure, and even cholesterol (Becker). People with pets have fewer doctor visits, shorter hospital stays, and an easier time recuperating after an illness (Becker). Animals also help in combating depression and isolation (Becker).

Naturalistic intelligence. In my findings, naturalist intelligence overlaps as a tool towards psycho-educational goals. The concept of a connection with nature is explored in the literature review. Levinson (1969) felt people need a feeling of communion with all of nature and they need this to maintain good mental health. Naturalists demonstrate expertise in the recognition and classification of the numerous species of their environment (Gardner, 1999). All divisions and foci within therapeutic riding may fall into exercising a naturalistic intelligence, depending on the focus and goals of the rider. However, the psycho-educational division of therapeutic riding may pay particular attention to recognition and classification of various aspects of horses. The literature reviewed on naturalistic intelligence fits well with the findings of this study.

Wilson argued that people are genetically predisposed to be close to animals, plants, and nature (Kohanov, 2001). He believed that biophilia is central to a human's mental development (Becker, 2002). This may explain the motivational factors and fascination animals provide for people, and in particular children. Schoen (2001) proposes that the theory of biophilia may help explain co-species' healing. Throughout thousands of years of development, the human brain developed circuitry to communicate with, and evaluate the behaviour of, other animals (Kohanov).

Linguistic intelligence. Linguistic intelligence overlaps with the psycho-educational goals in therapeutic riding. Riders may work towards improving their linguistics and communication. Communication was explored in the literature that I reviewed in reference to emotional intelligence. The development of nonverbal skills is a central component of emotional intelligence and is significant in therapeutic riding (Goleman, 1995).

Psychologists have determined that between 7 and 10 % of human communication is verbal (Kohanov, 2001). People who experience strong emotions may find it difficult to speak as the limbic system overrides the neocortex (Kohanov). Communication with horses is mostly nonverbal. Thus, people engaged in therapeutic riding are encouraged to excel in their nonverbal communication.

Communication was a concept examined in the literature on therapeutic riding that is significant in this study. Reasons for improved communication may be connected to motivation to speak or to use signals. Riders who have linguistic goals in therapy, perhaps in hippotherapy, may have a particular linguistic focus in therapeutic riding. For

people with speech and language difficulties, therapeutic riding may help by stimulating the whole nervous system (Becker, 2002).

Linguistic intelligence involves sensitivity to spoken and written language, the ability to learn languages, and the capacity to use language to accomplish certain goals (Gardner, 1999). Communication is an important aspect for all divisions of therapeutic riding, since riders communicate their desired wants, pace, and direction with their horse through the use of reins, legs, aids, and seat position. This may not be the conventional use of linguistic intelligence, but communication with horses is a language in signals.

Musical intelligence. Musical intelligence may not be directly related to a goal of therapeutic riding, but it may be a component of other goals such as linguistic intelligence and logical-mathematical intelligence. Musical intelligence entails skill in the performance, composition, and appreciation of musical patterns (Gardner, 1999). It is almost parallel structurally to linguistic intelligence (Gardner). However, some people who may excel in musical intelligence may have difficulty with linguistics. For example, some people who have autism may have a strong musical intelligence but a marked impairment in communication and language (Gardner).

Some divisions of therapeutic riding, such as the psycho-educational division, may exercise musical intelligence as a way to reach out to a rider who has difficulty with linguistics. All divisions of therapeutic riding may exercise musical intelligence as a means to help with a different goal. Literature reviewed on therapeutic riding did not explore the use of music in the learning and recovery process. This may be unique to this particular facility and to particular instructors and therapists.

Logical and mathematical intelligences. Literature I reviewed did not specifically explore therapeutic riding in light of logical-mathematical intelligence or abilities. Logical-mathematical intelligence is related to psycho-education goals of therapeutic riding. It involves the capacity to analyze problems logically, carry out mathematical operations, and investigate issues scientifically (Gardner, 1999). Intelligence tests and other traditional school testing typically involve testing logical-mathematical intelligence (Gardner).

Riders in any of the therapeutic riding divisions may exercise logical and mathematical intelligence by working on pace, spacing, and analyzing potential problems. However, riders in the psycho-education division may have a goal to specifically work on logical or mathematical intelligence.

Spatial intelligence. Spatial intelligence features the potential to recognize and manipulate the patterns of wide space as well as the patterns of more confined areas (Gardner, 1999). Working on spatial intelligence may be involved in all the divisions of therapeutic riding; however, this may not necessarily be the focus or goal of a rider. Spatial intelligence was not a concept reviewed in the literature for this study. Perhaps further research in this area would provide more insight into the spatial ability of therapeutic riders.

How Outcomes are Achieved

Motivation. One theory in the literature I reviewed that was evident in this study is the motivational aspects of animals for humans. Levinson (1969) believed that animals provide people with motivation for learning. Horses may provide motivation to learn or

recover, especially to individuals who may be averse to more conventional forms of education or therapy. People with physical disabilities who use wheelchairs may be motivated by a horse to perform physical tasks for therapy in the care for the horse (Hart, 2000a). Reasons explicitly contributing to this motivational aspect of horses were not explored in depth in this study, but are recommended for further research.

In exploring motivational factors with children, animals may offer a way for children to explore their physical and social world (Becker, 2002). The spontaneity of the interaction may be attractive to a child. For children between the ages of 3 and 6, 61 % of dreams may feature animals (Becker). Of the first 50 words that a child uses, 7 are words for animals (Becker). A child may also form powerful attachments to animals. Approximately 99 % of children from the ages of 3 to 13 say that they want a pet (Becker). Thus, it is quite evident that children may be drawn to animals. This may explain some of the usefulness of horses as learning and recovery supports.

Risk. The risk taken in therapeutic riding is a mental and physical risk taken by welcoming a change in one's life and accepting the horse as a support. Literature reviewed did not explore the element of risk in the learning and recovery process in therapeutic riding. This study did, however, find the element of risk an important component in this process. The risk component may be much greater in using horses, due to their size, than companion animals such as cats or dogs.

The additional risk in therapeutic riding may be strongly related to the power, strength, and size that horse's display. In taking a risk with such powerful animals and gaining confidence in learning to have a relationship with them, riders may feel

empowered to take risks in other areas of their lives. Taking into account the inevitable risk factor of therapeutic riding, risks are minimized by providers choosing horses that meet specific criteria. Providers ensure that the environment is safe and that riders feel comfortable.

Task analysis. Task analysis was found to be an important concept in the process towards learning and recovery in therapeutic riding, particularly as an approach used by the instructors. In this study, no literature reviewed explored task analysis as part of the learning and recovery process of therapeutic riding. The way in which task analysis is done is strongly dependent on the goals and needs of riders. This includes the time taken for riders to accomplish certain tasks, the way in which tasks are broken up, and the size of tasks.

Outcomes of Therapeutic Riding

Independence and mobility. Independence and mobility were central concepts reviewed in the literature on therapeutic riding. Animals may be an extension of a person (Fine, 2000b). As a symbol, horses may be associated with freedom (Kohanov, 2001). Horses may enable people to explore the world, expand their perspectives, and elevate themselves from the constraints of their own community (Kohanov). This ability of horses to give people independence and mobility is particularly important to people with disabilities that may be confined physically or mentally.

In my findings, the physical height of a rider on a horse was significant. For riders who may feel inferior in some aspects of their lives, the physical difference of being higher may change this feeling by their seeing the world from a different perspective. In

addition, for a person who has difficulty with mobility and is dependent on people or aids, riding may provide freedom and independence.

Confidence. Research explored confidence as an outcome of therapeutic riding, but did not account for the process. The focus of this study was not to exclusively explore the concept of confidence in therapeutic riding, but it came out in the findings as resulting from taking a risk and then achieving a goal.

Confidence seems to be connected with risk taking and the rider-centred approach. In this approach, riders are given control over their goals and process, not to mention a large animal. In gaining control, a rider may feel empowered. In addition, riders may feel more independent. When riders take a risk, they may gain confidence for accomplishing a difficult task. This confidence and willingness to take more risks may transfer to other aspects of riders' lives.

Transfer of abilities or skills. The abilities or skills learned may transfer to other aspects of riders' lives. If riders are successful in their accomplishments, then they may be willing to take additional risks. The concept of skills being transferred to other aspects of riders' lives is not an approach emphasized in the literature on therapeutic riding. It is essential that recovery or learning do not occur in isolation at the therapeutic riding facility only, and that abilities or skills learned can be used in other areas of a rider's life. Thus, if riders gain more trunk control and are better able to communicate during therapeutic riding, it is hoped that they will also be better able to communicate at home, in school, or in the community.

Larger Theoretical Issues

In this study, the experiential and holistic approach to learning and recovery for people with disabilities was explored through therapeutic riding. In this study, relationships were a central theme. Universal dynamics of team relationship and team matching are significant concepts in how outcomes are achieved in therapeutic riding. Furthermore, the horse and rider relationship was found through a mind-body connection. A mind-body connection involved a holistic approach where all aspects and senses of riders are considered in the process. The significance of providers and rider relationship was found, and the rider-centred approach was examined. Therapeutic riding falls into the general field of animal-assisted therapy. Findings from this study may or may not be applicable to other animals.

Studying therapeutic riding may not only provide new approaches and perspectives on animals, but also disabilities in general. People with disabilities may be forced into a lack of spontaneity in their lives due to dependence on others. They may not feel full inclusion in society and thus are prevented from some experiences due to their disabilities. They may feel trapped by their body by not being able to be included in some aspects of society due to mobility issues, dependence, or involuntary movements. This may have an effect on their mind and feelings of themselves and the world they live in. In therapeutic riding, riders are encouraged to use all their senses and may have experiences and accomplishments their peers may not have.

Implications for Practice

The insights and information gained from the study may provide documentation to discuss the effects of animal-assisted therapy and education with the health industry,

educational system, and general public. The study may also help to regulate the practices within therapeutic riding. People who might be interested in the results of this study include therapeutic riding providers, animal-assisted therapy and education providers, educators, mental health professionals, health professionals, people with physical, mental, psychiatric, or learning disabilities, parents of children with disabilities, and the community.

In Other Learning and Recovery Organizations

The findings of this study may be used for other programs that involve learning and recovery. This study looked at factors involved in the learning and recovery process in therapeutic riding that may also be applied to complement, extend, modify, or adapt other learning and recovery programs. Any or all components in relation to the goals, process, or outcomes of therapeutic riding may be beneficial to consider in other learning and recovery organizations.

Significant in the findings is the client's or student's motivation to learn or recover. For some people, horses and riding may be an attraction that becomes a motivational factor. Motivational factors are important for learning and recovery. Furthermore, in therapeutic riding there is an element of risk that is embedded in the modality. This risk-taking aspect may be a contributing factor to the empowerment and the confidence or independence gained by riders from this experience. Once outcomes are achieved, it may be valuable for riders if the skills or tools learned can be transferred to other aspects of their lives. This element of risk may also be useful for other learning or recovery programs to incorporate.

The universal dynamics of team relationships found in this study include pleasure, respect, adaptation, and safety. These team dynamics may be significant in learning and recovery in other organizations and are important to consider in programs. Within this, the rider-centred approach between the providers and rider relationship was found to be significant in the learning and recovery process of people with disabilities. This is an approach that may be considered by health care professionals and educators in their practice, particularly if students or clients are having difficulty with a current approach or model being used. It is important for health care professionals and educators to be aware of their own approach along with the strengths and weaknesses it offers.

In a rider-centred approach, riders are in control of the entire process including decisions about goals and outcomes. Gardner (1999) proposed possible strategies for educators to implement individually configured education in a large classroom with students of varying needs. Some of his suggestions included learning as much as possible about how particular children learn and sharing this knowledge with people working with these children (Gardner). As the children get older, they can provide information and feedback themselves. Gardner also suggested allowing students to remain with the same teacher for several years so that they can get to know each other very well. Perhaps if this is not possible, the information can be shared with subsequent teachers. Also, giving teachers and students flexibility so that more compatible matches can be made in classrooms is important (Gardner). Appropriate matches are also essential in therapy and the recovery process, as explored in this study.

Implications for Further Research

Research on therapeutic riding can provide theoretical and empirical grounding for improved therapeutic riding and the use of animals in the medical and educational community. There is a need to assess the use of animals so they may be considered part of a more recognized approach to helping people with physical, mental, psychiatric, and learning disabilities (A.M. Beck, 2000). Therapeutic riding is a continually growing field, especially in Canada. Literature and research have tended to focus on specific components and populations of riders who may benefit from therapeutic riding. This study looked at the dynamics of the participants and explored the learning and recovery process of people with disabilities involved in therapeutic riding in a general way to understand the underlying phenomenon. Perhaps research done with a specific focus may provide a useful framework to examine each component of the goals, process, and outcomes of therapeutic riding more closely.

The significance of team matching was not explored in the literature, although it was found to be an important concept in this study. Research into the significance of team matching in therapeutic riding may provide more insight, in addition to the team relationships involved, which include the horse and rider relationship related to the mind-body connection and the providers and rider relationship related to the rider-centred approach. Reviewed literature did not explicitly refer to therapeutic riding as using a rider-centred approach; therefore, it may be an approach particular to the facility in this study. Research into various approaches to therapeutic riding and the use of the person-centred model may provide insight.

Although the spiritual dimension of learning and recovery was not explicitly explored in this study, it is an important aspect to consider in an exploration of the whole

person, including the mind and body. It is important to address the spiritual health of both the riders and the providers in all divisions of therapeutic riding. Further research about the spiritual aspects of therapeutic riding may provide more insight.

Literature on therapeutic riding has not tended to examine the aspect of risk taking as part of the modality. Perhaps therapeutic riding theories and practice could further benefit from exploring other forms of risk taking in experiential education and therapy. Furthermore, communication is an important aspect for all divisions of therapeutic riding, since riders communicate their desired wants, pace, and direction with their horse through the use of reins, legs, aids, and seat position. Research in this area to understand rider communication may be beneficial.

Reviewed literature on therapeutic riding does not explore the use of music, logical-mathematical, and spatial abilities in the learning and recovery process. Further research in these areas involved in therapeutic riding may provide more information. In this study, no literature reviewed explored task analysis as part of the learning and recovery process of therapeutic riding. Further research into the various ways task analysis takes place and the way in which instructors and therapists learn to do task analysis may provide more insight. The concept of skills being transferred to other aspects of a rider's life is not an approach emphasized in the literature on therapeutic riding. Skill transfer may be a concept particular to the providers in this study, who feel that it is important for their riders, and further research may provide insight.

Conclusion

This chapter explored the implications of the findings from Chapter Four in terms of the implications for theory, including the articulation within existing theory and articulation within larger theoretical issues. This included exploring the findings in relation to literature on the goals, process, and outcomes of therapeutic riding, with a focus on the central theme of relationships. This chapter also explored the implications for practice in other learning and recovery organizations in addition to the implications for future research.

Holistic thinking asserts that the whole of a phenomenon is meaningful and more complex than the sum of its parts. In the learning and recovery process of therapeutic riding for people with disabilities, a holistic and experiential approach has shown the significance of the relationships between the parts. Therapeutic riding may provide a continuum between the observer and the observed, mind and body, experience and knowledge, and education and therapy.

Holism is a spiritual worldview in that there is awareness that our lives have a purpose, a direction, a meaning, and a goal that transcends our particular physical and cultural conditioning. The findings of this study may provide a map to guide people with disabilities and their providers in the journey of how to achieve learning and recovery goals through therapeutic riding. Therapeutic riding may help foster the awareness that the lives of people with disabilities have purpose, direction, meaning, and goals.

References

- Beck, A., & Katcher, A. (1996). Between pets and people: The importance of animal companionship. West Lafayette, IN: Purdue University Press.
- Beck, A. M. (2000). The use of animals to benefit humans: Animal-assisted therapy. In A. H. Fine (Ed.), Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice (pp. 21-39). San Diego, CA: Academic Press.
- Becker, M. (2002). The healing power of pets: Harnessing the amazing ability of pets to make people happy and healthy. New York: Hyperion.
- Bosacki, S. L. (1998). Is silence golden? The role of spiritual voice in folk pedagogy and folk psychology. International Journal of Children's Spirituality, 3(2), 109-121.
- Creswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five traditions. Thousand Oaks, CA: Sage.
- Crosby, A. (1995). A critical look: The philosophical foundations of experiential education. In K. Warren, M. Sakofs, & J. Hunt (Eds.), The theory of experiential education (pp. 3-14). Dubuque, IA: Kendall/Hunt.
- Delta Society. (1996). Standards of practice for animal-assisted activities and animal-assisted therapy. Renton, WA: Delta Society.
- DePaux, K. (1997). Research review: The review of research in therapeutic riding. In B. T. Engel (Ed.), Therapeutic riding II strategies for rehabilitation (pp. 21-29). Durango, CO: Barbara Engel Therapy Services.
- Dewey, J. (1938). Experience & education. New York: Simon & Schuster.
- Eisner, E. W. (1991). The enlightened eye: Qualitative inquiry and the enhancement of educational practice. New York: Macmillan.

- Engel, B. T. (1997a). Hippotherapy and equine-assisted therapy terms. In B. T. Engel (Ed.), Therapeutic riding II strategies for rehabilitation (pp. 63-66). Durango, CO: Barbara Engel Therapy Services.
- Engel, B. T. (Ed.). (1997b). Rehabilitation with the aid of a horse: A collection of studies. Durango, CO: Barbara Engel Therapy Services.
- Equine Assisted Growth and Learning Association. (2001). Equine-assisted mental health: Resource handbook. Santaquin, UT: EAGALA Inc.
- Ertmer, P. A. (1997). Common qualitative research designs. In P. D. Leedy, Practical research: Planning and design (6th ed.), (pp. 155-172). Upper Saddle River, NJ: Prentice-Hall.
- Fine, A. H. (2000a). Animals and therapist: Incorporating animals in outpatient psychotherapy. In A. H. Fine (Ed.), Handbook on animal assisted therapy: Theoretical foundations and guidelines for practice (pp. 179-211). San Diego, CA: Academic Press.
- Fine, A. H. (2000b). Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice.. San Diego, CA: Academic Press.
- Freud, S. (1905). On sexuality. London: Penguin Books.
- Freud, S. (1955). On metapsychology. London: Penguin Books.
- Gardner, H. (1999). Intelligences reframed: Multiple intelligences for the 21st century. New York: Basic Books.
- Goleman, D. (1995). Emotional intelligence: Why it can matter more than IQ. New York: Bantam Books.

- Graham, B. (1999). Creature comfort: Animals that heal. London: Simon & Schuster.
- Granger, B. P., & Kogan, L. (2000). Animal-assisted therapy in specialized settings. In A. H. Fine (Ed.), Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice (pp. 213-236). San Diego, CA: Academic Press.
- Greenberg, L. S., Watson, J. C., & Lietaer, G. (1998). Handbook of experiential psychotherapy. New York: The Guilford Press.
- Hart, L. A. (2000b). Understanding animal behaviour, species, and temperament as applied to interactions with specific populations. In A. H. Fine (Ed.), Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice (pp. 81-97). San Diego, CA: Academic Press.
- Hart, L. A. (2000a). Psychosocial benefits of animal companionship. In A. H. Fine (Ed.), Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice (pp. 59-78). San Diego, CA: Academic Press.
- Jones, S. E. (1994). Occupational therapist and client experiences of a mental health group. St. Catharines, ON: Brock University.
- Joplin, L. (1995). On defining experiential education. In K. Warren, M. Sakofs, & J. Hunt (Eds.), The theory of experiential education (pp. 15-22). Dubuque, IA: Kendall/Hunt.
- Jung, C. (1968). The archetypes and the collective unconscious. New York: Princeton University.

- Katcher, A. H. (2000). Animal assisted therapy and the study of human-animal relationships: Discipline or bondage? Context or transitional object? In A. H. Fine (Ed.), Handbook on Animal-assisted therapy: Theoretical foundations and guidelines for practice (pp. 461-473). San Diego, CA: Academic Press.
- Katcher, A. H., & Wilkins, G. G. (2000). The centaur's lessons: Therapeutic education through care of animals and nature study. In A. H. Fine (Ed.), Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice (pp. 153-177). San Diego, CA: Academic Press.
- Kehoe, N. C. (2001). Addressing the spiritual dimension: Nourishing the soul. Network, 17(1), 6-9.
- Kohanov, L. (2001). The Tao of equus: A women's journey of healing & transformation through the way of the horse. Novato, CA: New World Library.
- Levinson, B. M. (1969). Pet oriented child psychotherapy. Springfield, IL: Thomas.
- Longden, M. L. (1999). Coach with courage: Thoughts on teaching horses and riders of all abilities. Orillia, ON: Mary Longden and Riding for the Disabled Association of Australia.
- Luckner, J. L., & Nadler, R. S. (1997). Processing the experience (2nd ed.). Montecito, CA: True North Leadership.
- Makins, M. (Ed.). (1994). Collins English dictionary (3rd ed.) Glasgow, Scotland: HarperCollins.

- Melson, G. F. (2000). Companion animals and the development of children: Implications of the biophilia hypothesis. In A. H. Fine (Ed.), Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice (pp. 375-383). San Diego, CA: Academic Press.
- Miller, R. (1992). What are schools for? Holistic education in American culture (2nd ed.). Brandon, VT: Holistic Education Press.
- O'Connor, C. (2001, April 4). The silent therapist: A review of the development of equine assisted psychotherapy. Available Internet: www.catra.net/info/silent.html
- Palys, T. (1997). Research decisions: Quantitative and qualitative perspectives. Toronto, ON: Harcourt Brace.
- Pert, C. (1997). Molecules of emotion. New York: Simon & Schuster.
- Prochazka, L. (1995). Internalizing learning: Beyond experiential education. In K. Warren, M. Sakofs, & J. Hunt (Eds.), The theory of experiential education (pp. 143-148). Dubuque, IA: Kendall/Hunt.
- Rector, B. K. (1994). Equine experiential process work. In P. A. Eaton (Ed.), Eighth international therapeutic riding congress: The complete papers (pp. 100-104). Levin, New Zealand: National Training Resource Centre.
- Rogers, C. R. (1951). Client-centred therapy. Boston, MA: Houghton Mifflin.
- Schoen, A. M. (2001). Kindred spirits. New York: Broadway Books.
- Serpell, J. A. (2000). Animal companions and human well-being: An historical exploration of the value of human-animal relationships. In A. H. Fine (Ed.), Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice (pp. 3-19). San Diego, CA: Academic Press.

- Strauss, A., & Corbin, J. (1994). Grounded theory methodology: An overview. In N. Denzin & Y. Lincoln (Eds.), Handbook of qualitative research (pp. 273-285). Thousand Oaks, CA: Sage.
- Strauss, A., & Corbin, J. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.). Thousand Oaks, CA: Sage.
- Wilson, C. C., & Turner, D. C. (1998). Companion animals in human health. Thousand Oaks, CA: Sage.
- Winnicott, D. W. (1971). Playing & reality. London: Tavistock.

Selected Bibliography

- Abdill, M., & Juppe, D. (1997). Pets in therapy. Ravendale, WA: Idyll Arbor.
- Armstrong, T. (1994). Multiple intelligence in the classroom. Alexandria, VA: Association for Supervision and Curriculum Development.
- Bruner, J. (1996). The culture of education. Cambridge, MA: Harvard University Press.
- Centre for Higher Education Development. (April 9, 2001). What is “experiential Learning.” Available Internet: www.el.uct.ac.za
- Creswell, J. W. (2002). Educational research: Planning, conducting, and evaluating quantitative and qualitative research. Upper Saddle River, NJ: Pearson Education.
- Dewey, J. (1916). Democracy and education. New York: Free Press.
- Fredrickson, M., & Howie, A. R. (2000). Guidelines and standards for animal selection in animal-assisted activity and therapy programs. In A. H. Fine (Ed.), Handbook on animal assisted therapy: Theoretical foundations and guidelines for practice (pp. 100-114). San Diego, CA: Academic Press.
- Freedman, J., & Combs, G. (1996). Narrative therapy: The social construction of preferred realities. New York: W.W. Norton.
- Friedmann, E. (2000). The animal-human bond: Health and wellness. In A. H. Fine (Ed.), Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice (pp. 41-58). San Diego, CA: Academic Press.
- Gardner, H. (1983). Frames of mind: The theory of multiple intelligences. New York: Basic Books.

- Gardner, H. (1993). Multiple intelligences: The theory in practice. New York: Basic Books.
- Hunt, J. S. (1995). Dewey's philosophical method and its influence on his philosophy of education. In K. Warren, M. Sakofs, & J. Hunt (Eds.), The theory of experiential education (pp.23-32). Dubuque, IA: Kendall/Hunt.
- Irwin, C. (2001, April 4). Equine assisted psychotherapy. Available Internet: www.chrisirwin.com/eap.htm
- Kraft, R. J., & Kielsmeier, J. (Ed.), (1995). Experiential learning in schools and higher education. Boulder, CO: Kendall/Hunt.
- Lakoff, G., & Johnson, M. (1981). Metaphors we live by. Chicago, IL: University of Chicago Press.
- Levine, M. (2002). A mind at a time. New York: Simon & Schuster.
- Mazza, V. G. (1997). Special education within therapeutic riding. In B. T. Engel (Ed.), Therapeutic riding II strategies for rehabilitation (pp. 443-444). Durango, CO: Barbara Engel Therapy Services.
- Miles, M., & Huberman, A. (1994). Qualitative data analysis: A sourcebook of new methods. Thousand Oaks, CA: Sage.
- Neuman, W. L. (1997). Social research methods: Qualitative and quantitative approaches (3rd ed.). Boston, MA: Allyn and Bacon.
- Pearson, T. (Ed.). (1998). An annotative bibliography for equine facilitated psychotherapy. Denver, CO: NARHA.
- Perkins, D. (1992). Smart schools: Better thinking and learning for every child. New York: The Free Press.

- Peshkin, A. (1993). The goodness of qualitative research. Educational Researcher, 22(2), 23-29.
- Potok, A. (2002). A matter of dignity: Changing the world of the disabled. New York, NY: Bantam Books.
- Reed, E. (1996). The necessity of experience. New Haven, CT: Yale University Press.
- Roberts, M. (1996). The man who listens to horses. New York: Random House.
- Roberts, M. (2001). Horse sense for people: Using the gentle wisdom of the join-up technique to enrich our relationships at home and at work. Toronto, ON: Alfred A. Knopf Canada.
- Segal, J. (1997). Raising your emotional intelligence: A practical guide. New York: Henry Holt.
- Silverman, D. (1993). Interpreting qualitative data: Methods for analyzing talk, text, & interaction. Newbury Park, CA: Sage.
- Simmie, S., & Nunes, J. (2001). The last taboo: A survival guide to mental health care in Canada. Toronto, ON: McClelland & Stewart.
- Strauss, A., & Corbin, J. (Eds.). (1997). Grounded theory in practice. Thousand Oaks, CA: Sage.
- Tyler, J. J. (1994). Equine psychotherapy: Worth more than just a horse laugh. In E. Cole et al. (Eds.), Wilderness therapy for women: The power of adventure. (pp. 139-146). New York: Harworth Press.

Appendix A: Definitions of Terms and Associations

American Hippotherapy Association (AHA) - This is a section of the North American Riding for the Handicapped Association (see definition) that focuses on hippotherapy (see definition).

Animal-Assisted Activities (AAA) - Activities that involve animals visiting people. The same activity can be repeated with different people, unlike a therapy program that is tailored to a particular person or medical condition (Delta Society, 1996). It is delivered in a variety of environments by specially trained professionals, paraprofessionals or volunteers in association with animals that meet specific criteria (Delta Society, 1996). It provides opportunities for motivational, educational, and/or recreational benefits to enhance the quality of life.

Animal-Assisted Therapy (AAT) - The term animal-facilitated therapy may also be used, but animal-assisted therapy indicates greater participation by the client in therapy than just an activity being facilitated (Delta Society, 1996). AAT involves a health or human service professional that uses an animal as part of his/her job. AAT is a goal-directed intervention in which an animal meeting specific criteria is an integral part of the treatment process (Delta Society, 1996). AAT is designed to promote improvement in human physical, social and emotional, or cognitive functioning.

Association for Experiential Education (AEE) - This association develops and promotes experiential education in all settings. It is committed to supporting professional development, theoretical advancement, and evaluation in the field of experiential education worldwide.

Canadian Therapeutic Riding Association (CanTRA) - This is a non-profit organization for therapeutic riding and riders with disabilities in Canada. It provides support to individuals and groups through education, certification, insurance coverage, communication, and accreditation.

Delta Society - This is an international, non-profit organization of pet owners and health or human service professionals. Its mission is to promote animals helping people improve their health, independence, and quality of life (Delta Society, 1996).

Disability - Restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being (Engel, 1997a). Any physical, mental, or emotional impairment that substantially limits one or more major life activities (Granger & Kogan, 2000).

Equine Assisted Growth and Learning Association (EAGALA) - This is a non-profit organization developed to address the need for resources, education, and professionalism in the field of equine-assisted psychotherapy. The mission of the organization is to promote, educate, and provide standards of practice, ethics, and safety in the field of equine-assisted psychotherapy.

Equine Assisted Psychotherapy (EAP) - The term equine-facilitated therapy (EFT) may also be used, but equine-assisted psychotherapy indicates greater participation by the client in therapy than its just being facilitated. Horses are used as a support for emotional growth and learning in this emerging field. EAP is a collaborative effort between a licensed therapist and a horse professional. Because of its intensity and effectiveness, it is considered a short-term or brief approach (Equine Assisted Growth and Learning Association, 2001). Emotional development through therapeutic riding

may result in increased self-control, increased self-esteem, increased ability to cope with failure and frustration, increased ability to negotiate, decreased fear and anxiety, and increased social skills (Longden, 1999).

Equine Facilitated Mental Health Association (EFMHA) - This section of the North American Riding for the Handicapped Association (see definition) focuses on equine-facilitated mental health. The association promotes work with horses in the treatment of people with emotional, behavioural, social, mental, physical, or spiritual needs. The association promotes, educates, and sets standards in equine facilitated psychotherapy.

Experiential Education - Experiential education is learning through doing. It is a process through which individuals construct knowledge, acquire skills, and enhance values from direct experience. It is based on the assumption that all knowing must begin with the individual's relationship to the topic (Luckner & Nadler, 1997). This is a philosophical orientation toward teaching and learning that values and encourages linkages between concrete educational activities and abstract lessons in order to maximize learning (Luckner & Nadler).

Experiential Therapy - Experiential therapy has its roots in client-centred, existential, and Gestalt approaches to psychotherapy (Greenberg et al., 1998). The main objective of experiential therapy is to work with clients' awareness by focusing on subjective experiences, promoting reflectivity, and promoting a sense of agency (Greenberg et al., 1998).

Goals – Goals may be related to treatment or an activity. A goal is a skill or accomplishment for a client/student to work toward (Delta Society, 1996).

Hippotherapy - A treatment using horses for people with movement dysfunction and/or neurological disorders used by physical or occupational therapists trained as hippotherapists. The horse's walk provides sensory input through movement, which is similar to human movements of the pelvis while walking. Hippotherapy may improve motivation, balance, coordination, strength, endurance, gross and fine motor skills, posture, and mobility (Longden, 1999). It may also affect psychological, cognitive, behavioural, and communicative functions. The therapist may use exercises or activities to achieve specific goals (Engel, 1997a).

North American Riding for the Handicapped Association (NARHA) - This service organization in the United States was created to promote the well-being of individuals with physical, emotional or mental disabilities through equine activities (Engel, 1997a). Its subdivisions include the American Hippotherapy Association (AHA) and Equine Facilitated Mental Health Association (EFMHA).

Occupational Therapist (OT) - A specially trained and credentialed person belonging to an occupational therapist association who works on physical, social, and cognitive skills with clients (Delta Society, 1996). They also help people regain the use of their hands and upper body and increase range of motion.

Ontario Equestrian Federation - This federation is an umbrella organization that is committed to equine welfare and to providing leadership and support to the individuals, associations, and industries in Ontario's horse community.

Outcome/Objective - The aim of an action; the method used to reach therapeutic/educational goals (Delta Society, 1996).

Physical Therapist (PT) - A specially trained and credentialed person belonging to a physical therapy association who works on improving movement that uses the larger muscle groups. They may help a client strengthen his/her legs and walk (Delta Society, 1996).

Therapeutic Riding (TR) - This is a general term used to describe all equine-related activities performed for the benefit of persons with disabilities or handicaps. This includes the four divisions of education, sport, recreation and leisure, and therapy including hippotherapy and equine-assisted psychotherapy.

Vaulting - The assisted performance of gymnastics on horseback. It offers physical and psychological benefits in terms of balance, co-ordination, and confidence (Graham, 1999).

Appendix B: Narrative Instructions

Please write a real story/narrative about a rider that stands out in your mind.

Select a rider who you were with for several lessons, so that you were able to see the impact of therapeutic riding with a focus on the psychological and educational aspects.

Please use as much detail and reflection about this story as possible, make it as long as necessary, and typewritten if possible. Do not include names and identifying information about this rider for confidentiality reasons.

Ask yourself:

- What, if any, were the personal growth and learning goals of therapeutic riding for this rider?
- How were these personal growth and learning outcomes achieved?
- What were the personal growth and learning outcomes?

Appendix C: Interview Questions

Demographics:

- Tell me about your involvement in therapeutic riding. How long have you been involved? What is your role?
- What type of training, experience, and/or education is needed for you to be a therapeutic riding provider?

Goals:

- What, if any, therapeutic approaches do you use as a therapeutic riding provider? Why do you select these approaches?
- What are the general goals of therapeutic riding?
- What are the personal growth (psychological) and learning (educational) goals of therapeutic riding?
- Why are horses used to achieve these goals? What is the role of the horse-human bond in therapeutic riding?
- What clients do you think are most suited for therapeutic riding?

Process:

- How may the personal growth (psychological) and learning (educational) outcomes be achieved?
- What are the steps in the process? What are the major events or benchmarks in the process?
- What, if any, are the obstacles to change?
- Who are the participants in therapeutic riding? How do they participate in the process?
- How are you involved in the process of therapeutic riding?
- How do you feel the environment influences therapeutic riding?

Outcomes:

- What personal growth (psychological) and learning (educational) outcomes may be achieved by participants?
- How long do you think the effects last once therapeutic riding is discontinued?
- What do you think is the optimum frequency and duration of therapeutic riding?

Appendix D: Letter of Information

BROCK UNIVERSITY, DEPARTMENT OF GRADUATE STUDIES in EDUCATION

Title of Study: "Exploring the Experiential Growth and Learning Curriculum of Therapeutic Riding: The Change Process Involved"

Researcher: Kate Dunstan, Supervisor Dr. Anne Elliott, Committee Members
Dr. Michelle McGinn and Dr. Sandra Bosacki

Dear Participant,

Education and therapy are greatly enhanced by experiences that lead towards growth and learning. Experiences can be used towards educational and therapeutic goals. Therapeutic riding is experiential in nature. Participants learn about themselves, others, and the world around them by participating in activities with a horse. However, the change process involved in the growth and learning curriculum of therapeutic riding is not well understood.

The purpose of this grounded theory study is to explore the theory that explains the change process of riders involved in growth and learning curriculum of therapeutic riding at a therapeutic riding facility. This will be explored through the perceptions of the providers of therapeutic riding.

Few studies have addressed how therapeutic riding outcomes are achieved or how the change process involved in therapeutic riding occurs. Furthermore, a small amount of studies have done research with an educational focus in therapeutic riding.

The data sources that you are involved in are a narrative piece and an interview. In addition, it would be helpful if you can provide any written materials that would be useful to demonstrate the goals, outcomes, and process involved in therapeutic riding that are not confidential. This may include curriculum items, lesson plans, and brochures used at the therapeutic riding facility.

The narrative piece is to be completed prior to the interview. This will be on a case that stands out in your mind concerning the change process of one rider. For the interview, the questions will be provided prior to it to allow for reflection and thought. An example of a question that may be asked in the interview is "What are the general goals of therapeutic riding?" These interviews will be audio recorded. They will take place in an office space at the therapeutic riding centre. After the interview is completed, transcribed and analyzed, you will be asked to look over it and any changes that you feel are necessary will be made.

There are no known or anticipated risks associated with participation in this research.

All personal information will be kept strictly confidential and all information will be coded so that your name will not be associated with your responses. Only I, Kate Dunstan, will have access to the data.

There will be no payment for your participation.

Participation in the study is voluntary; you may withdraw from the study or decide not to answer a question at any time and for any reason without penalty.

The Research Ethics Boards of Brock University has officially approved this study (File #01-005-Dunstan). If you have concerns or questions about your involvement in this study you may contact me Kate Dunstan, at 416-495-6819, katiedunstan@hotmail.com, my supervisor Dr. Anne Elliott at 905-688-5550 ext.3934, aelliott@ed.brocku.ca, or the Director of the Office of Research Services at 905-688-5550 ext. 4315.

You will be notified when copies of the study's final reports will be available and they can be provided for you if you request.

Sincerely,

Kate Dunstan
M.Ed. Candidate
Brock University

Appendix E: Informed Consent Form

BROCK UNIVERSITY, DEPARTMENT OF GRADUATE STUDIES IN EDUCATION

Title of Study: "Exploring the Experiential Growth and Learning Curriculum of
Therapeutic Riding: The Change Process Involved"

Researcher: Kate Dunstan, Supervisor Dr. Anne Elliott, Committee Members Dr.
Michelle McGinn and Dr. Sandra Bosacki

**I agree to participate in the research study described on the attached Letter of
Information.**

**I understand that the study in which I have agreed to participate will involve doing
a narrative piece and an interview.**

**I understand that my participation in this study is voluntary and I may withdraw
from the study at any time for any reason without penalty.**

I understand that there will be no payment for my participation.

**I understand that there is no obligation to answer any questions or participate in
any aspect of this study that I consider invasive, offensive, or inappropriate.**

**I understand that all personal data will be kept strictly confidential and that all
information will be coded so that my name is not associated with my answers. I
understand that only the researcher named above will have access to the data.**

Participant Signature _____ Date _____

This study has been reviewed and approved by the Brock Research Ethics Board. (File
#01-005-Dunstan).

If you have any questions or concerns about your participation in the study, you may
contact Kate Dunstan (416-495-6819, katiedunstan@hotmail.com, my supervisor Dr.
Anne Elliott (905-688-5550 ext. 3934, aelliott@ed.brocku.ca) or the Director of the
Office of Research Services (905-688-5550 ext. 4315).

Feedback about the use of the data collected will be available during the month of May
2002. You will be notified that it is ready and a written explanation will be provided for
you upon request.

Thank you for your help! Please take one copy of this form with you for future reference.

I have fully explained the procedure of this study to the above volunteer.

Researcher Signature _____ Date _____

By participation in this research study, you will have an opportunity to reflect on your own experiences with therapeutic riding.

This research may have potential benefits to the scientific community and society, which would involve contributing to the small amount of researched material in the field of therapeutic riding particularly in exploring the process involved. Furthermore, educational and therapeutic implications to therapeutic riding programs are addressed.

Thank you for your participation in the study.

Sincerely,

Kate Dunstan
M.Ed. Candidate
Brock University

Appendix F: Sections B-F Ethics Submission

SECTION B: SUMMARY OF PROPOSED RESEARCH

1. PURPOSE AND/OR RATIONALE FOR PROPOSED RESEARCH

Therapeutic riding is a form of experiential education and experiential therapy. The core of learning is greatly enhanced by experiential forms of education. This type of education involves students learning through experience, rather than to simply tell or show students what should be done. Experiential learning can be described as beginning with an experience followed by reflection, discussion, analysis, and evaluation of the experience.

In therapy, the client-therapist relationship is central to the process and outcomes achieved. The therapeutic relationship involved in animal assisted therapy can also be explored in a similar manner. Animals may be incorporated into therapy for various reasons. This may include animals being used to decrease initial reservations that may develop from entering therapy (Fine, 2000). The therapist may appear less threatening thus, the client may be more willing to reveal him or herself. Another reason animals are useful in therapy is as a method for rapport building (Fine, 2000). Animals may act as a catalyst in helping a client make more progress. They may also act as a catalyst for emotion and discussion within therapy. Animals can be used in role modeling and as metaphors and storytelling in therapy to help clients uncover internal concerns (Fine, 2000). The therapeutic relationship may also provide a secure attachment relationship that may otherwise have not occurred in the client's life (Beck & Katcher, 1996).

The researcher's hypothesis is that therapeutic riding providers will perceive the outcomes achieved in therapeutic riding to be determined by the process involved. The researcher proposes that there are two main umbrella categories concerning the process. These categories explain how and why therapeutic riding outcomes are achieved. They are the experiential quality of therapeutic riding and the therapeutic relationship between the horse, rider, and providers involved.

Therapeutic horse riding recognizes several divisions: sport, medicine/therapy, and education. In sports riding, the instructor teaches the person with a disability how to ride astride a horse in the most normal way possible. In the medical approach, therapists can use the movement of the horse as a means to facilitate more normal movement in the client, relax tight muscles, and improve strength, coordination, and motor skills (Engel et al, 1989). Equine assisted psychotherapy can also be used as an alternative to traditional psychotherapy.

In educational and psychological therapeutic riding, talents learned in the horse stables can transfer to classroom and everyday living. In an educational approach, teachers can use the horse, horse care, and riding skills as the means of teaching vocabulary, spelling, and reading. They can use the equestrian environment to increase attention span and develop problem solving-strategies (Engel et al., 1989). Results have revealed

significantly improved language skills, emotional control, social awareness, peer relations, and motor skills (Brock, 1987).

Educational and psychological outcomes derived are achieved by stimulating the rider's interest and motivation to learn. An increase in self-concept has also been reported (Brock, 1987). Furthermore, children with various problem behaviours have improved significantly when exposed to a therapeutic riding program (Brock, 1987). Gains for participants may also include improved social interaction, attitude, and co-operation.

This study will explore the curriculum of therapeutic horseback and it will focus on the educational and psychological goals, process, and outcomes through the perceptions of the providers of therapeutic horseback riding. In the process of therapeutic riding the experiential quality and the therapeutic relationship between the horse, rider, and providers involved seem essential components for goals to become outcomes. Few studies have addressed how the therapeutic riding outcomes are achieved or how the therapeutic riding process works. Furthermore, few studies have had an educational focus in therapeutic riding. Detailed studies of therapeutic riding can provide theoretical and empirical grounding for current and improve therapeutic riding for all involved. This includes the riders, their families, and the providers of therapeutic riding.

This thesis connects the theoretical and applied aspects of the curriculum of therapeutic riding by exploring the educational and psychological goals, process, and outcomes. Specifically, the research addresses the following guiding questions:

- **What are the educational and psychological goals of therapeutic riding?**
- **What are the educational and psychological outcomes in therapeutic riding?**
- **How are the educational and psychological outcomes achieved? Why does this process work?**

This application seeks approval from the Research Ethics Board to explore the curriculum of therapeutic horseback riding with the focus on the educational and psychological goals, process, and outcomes as perceived by the therapeutic riding providers.

2. METHODOLOGY/PROCEDURES

This study uses a qualitative case study approach. It is an inductive and descriptive case study because the observation precedes theory (Palys, 1997). It is also a naturalistic inquiry, which involves observation and research done in the natural setting of the topic. It also incorporates the use of narrative as a data source in the field notes that the researcher will keep.

The data sources for this thesis are the following:

- a. Field notes including observations and insights or reflections.
- b. Researcher's journal about her own experiences during her hours of employment from 8 am to 4 p.m. weekdays.

- c. Narrative piece completed by each participant prior to an interview. This will be on a case that stands out to them that involves one rider where s/he was present for several lessons so that this participant witnessed the processes and outcomes involved in therapeutic riding.
- d. Interview with all participants. The questions will be provided to the participants prior to interview to allow for reflection and thought. These interviews will be audio recorded. They will take place in an office space at the therapeutic riding centre or a convenient pre-arranged location. The interviews will later be transcribed and analyzed. A member check will be done and any necessary changes will be made.
- e. Written documents concerning goals, process, and outcomes. This may include curriculum items, lesson plans, and brochures used at the therapeutic riding facility.

3. PARTICIPANTS

The sampling procedure is a non-probabilistic and purposive sample. In this procedure participants are intentionally sought because they meet the criteria for inclusion in the study (Palys, 1997).

Participants include the following:

- a. 1 Director
- b. 2 Horse instructors
- c. 2 Therapists (Physio/Occupational)
- d. 2 Volunteers
- e. 2 Student summer employees
- f. Researcher

In terms of the researcher's relationship with the above participants, she has been volunteering at this therapeutic riding centre in Southern Ontario once a week since April 2001. The researcher will be employed as a student summer employee at this therapeutic riding centre in Southern Ontario every weekday throughout the summer 8-week session from July 16 to August 24, 2001. Thus, she has had contact with the director, several riders and their families, instructors, volunteers, and therapists, that may/may not be involved in this study.

Each therapeutic riding lesson is for one hour and as an employee the researcher will take care of the horse through preparing tack, grooming, and leading. She will also ensure the well being of the rider through both physical and emotional support during the lessons. She will also reinforce what the instructor has taught or asked the rider to demonstrate. Thus, the researcher will be a participant-observer during this period. She will keep a journal of her personal experiences during this time of employment. The other methods used in this study will be done outside of her hours of employment.

4. RECRUITMENT PROCESS

The director will be contacted first and will be asked which potential participants meet the criteria and are best suited to be involved in this study. Then each potential

participant will be approached in person, by telephone, or email and asked if s/he would like to be a participant in the study. It will be made clear that s/he does not have to participate however, if s/he chooses to participate his/her participation is confidential and s/he can withdrawal at any time.

5. COMPENSATION FOR PARTICIPATNS

All participants will have access to the results of the study. A copy of the thesis will be presented to the director of the therapeutic riding facility upon its completion. This study may be useful for the facility and for individual participants in their provision of therapeutic riding. After the study, a small gift will be given to all participants to thank them for their help.

6. FEEDBACK TO PARTICIPANTS

All participants will be verbally thanked for their assistance. Complete information about the objective of the research is provided in the Letter of Information received prior to the study participation (see attached). Once the study is complete, all the participants will be notified in person, by phone, or email that the researcher can provide them a summary of the study if they wish.

C. POTENTIAL BENEFITS FROM THE STUDY

1. The content of this study will be useful to all participants. This includes the director, volunteers, summer employees, instructors, and therapists. It will also be useful for non-participants such as the riders and their families. Participants may experience direct benefits from their involvement in this thesis by having the opportunity to reflect and evaluate their perceptions of the effects of therapeutic riding in a non-judgmental setting.
2. The potential benefits to the scientific community and society that would justify involvement of participants in this study involve contributing to the small amount of researched material in the field of therapeutic riding particularly looking at the process involved and with an educational focus.

D. POTENTIAL RISKS FROM THE STUDY

1. There are no known or anticipated risks associated with this research beyond those that would be encountered by participating students in their daily life.
2. This research does not involve a topic that might be expected to cause participants emotional distress. It will be explained to all participants that if any questions in the interview or narrative make them feel uncomfortable they do not have to answer them and they may terminate them altogether.

3. The researcher will at no time be isolated with a single participant. Interviews will take place in an office with windows and an open door at the therapeutic riding facility, or a convenient and prearranged location.

4. This research is not expected to cause participants' mental, psychological harm or social harm. Several measures are in place to ensure no harm is done. This includes participants being told they can terminate or decide not to answer any questions during the interview or in the narrative. No changes or alterations will be made to the usual therapeutic riding lessons themselves. Participants are explained that confidentiality will be ensured.

5. This research is not expected to cause participants physical harm to their health. Several measures are in place to ensure no harm is done. Instructors are trained to work with physical and psychological disabilities. In addition, there is a physio/occupational therapist on site to aid in therapeutic riding. No changes or alterations will be made to the usual therapeutic riding lessons themselves.

6. This research in no way infringes on the rights of participants. They will all be informed of the study and what their participation includes. They have the choice to terminate or not answer any question they may be asked.

7. The procedure in place to protect the physical and psychological health of the participants will be that they will be told they can terminate or decide not to answer any questions during the interview or in the narrative. No changes or alterations will be made to the usual therapeutic riding lessons themselves. It will be explained to the participants that confidentiality will be ensured. Interviews will take place in an office with a window and open door at the therapeutic riding facility, or a convenient and prearranged location. After the interview is completed, transcribed and analyzed, the participants will be asked to look over it and any changes that they feel are necessary will be made.

Steps to minimize any distress during the process and to restore participants to their pre-experiential state include? This study is not expected to cause the participants distress, and attempts will be made to make the experience as pleasant as possible.

E. FREE AND INFORMED CONSENT

1. The attached Letters of Information and Consent Forms fully inform participants about the research.

2. No minors are involved in this study. All participants will be 18 years or older.

3. All known risks and benefits to participants beyond those outlined in the questions above have been identified.

4. In terms of the debriefing process, the participants will be notified when copies of the project's final reports will be available and they can be mailed to them if they request.

F. PRIVACY AND CONFIDENTIALITY

Procedures to be used to ensure: (a) Anonymity of participants includes pseudonyms or deletion of names to be used in any reports. Identifying characteristics will be disguised in final reports and participants will have the opportunity to do a member check concerning the interviews. Only the researcher will know the names and corresponding pseudonyms of the participants'; (b) For confidentiality of data, all paper data will be stored at the researcher's residence; (c) Written records and audio tapes will be secure and stored in the researcher's residence; (d) In terms of the final disposal, all paper narrative, written documents, all paper notes, and audio tapes will be destroyed five years after the completion of the project.

Appendix G: Research Ethics Board Approval and Expedited Review Approval

Brock University

Senate Research Ethics Board
Room C315

Extensions 3205/4315,

FROM: David Butz, Chair
Senate Research Ethics Board (REB)

TO: Anne Elliott, Faculty of Education
Michelle McGinn, Faculty of Education
Sandra Bosacki, Faculty of Education
Kate Dunstan, Faculty of Education

FILE: 01-005 - Dunstan

DATE: August 09, 2001

The Brock University Research Ethics Board has reviewed the research proposal:

"Exploring the Curriculum of Therapeutic Riding: Goals, Process and Outcome"

The Subcommittee finds that your proposal conforms to the Brock University guidelines set out for ethical research.

***Accepted as is.** (However, in the text describing the protocol, the researcher states that she will instruct the participants not to use client names in their narratives or in the interview, but the verbal protocol provided does not include that instruction. The researcher should make sure she verbally instructs her participants not to identify clients.)

Please note: Changes or Modifications to this approved research must be reviewed and approved by the committee. Please complete form #5 - ***Request for Ethics Clearance of a Revision or Modification to an Ongoing application for Ethics Review of Research with Human Participants*** and submit it to the Chair of the Research Ethics Board. You can download this form from the Office of Research Services or visit the web site:

<http://www.BrockU.CA/researchservices/mainethicsformpage.html>

DB/dvo

Deborah Van Oosten

Research Ethics Officer
Brock University <http://www.brocku.ca/researchservices/>
phone: (905)688-5550, ext. 4315 fax: (905)688-0748



Brock University

Senate Research Ethics Board**Extensions 3205/3035, Room C315**

FROM: D. Butz, Chair
Senate Research Ethics Board (REB)

TO: Anne Elliott, Education
Kate Dunstan

RE: **Continuing Review/Final Report**
File #: 01-005
Researchers: Kate Dunstan
Originally Accepted: August 09, 2001
Date of Completion: May 17, 2002

DATE: May 28, 2002

Thank you for completing the *Continuing Review/Final Report* form. The Brock University Research Ethics Board has reviewed this report for:

Exploring the Curriculum of Therapeutic Riding: Goals, Process and Outcome

The Committee finds that as of **May 17, 2002**, research participants are no longer being studied or followed on the above protocol and therefore, this protocol is officially terminated by the Research Ethics Board.

*** Final Report Accepted.**

DB/dvo